

An Assessment of the Army Officer Education System from an Adult Learning Perspective

**A Monograph
by
Major Matthew R. McKinley
United States Army**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

Academic Year 04-05

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> OMB No. 074-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 052605	3. REPORT TYPE AND DATES COVERED Monograph		
4. TITLE AND SUBTITLE An Assessment of the Army Officer Education System from an Adult Learning Perspective		5. FUNDING NUMBERS		
6. AUTHOR(S) Major Matthew R. McKinley				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) US Army Command and General Staff College School of Advanced Military Studies 250 Gibbon Ave. Fort Leavenworth, KS 66027		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College Fort Leavenworth, KS 66027		10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 Words) This monograph examines the Officer Education System as a sub-set of Army education to determine how well OES is responding to the call for critical thinkers and life long learners and to examine some underlying assumptions upon which OES rests. This study focuses on the Officer Basic Course, the Captains Career Course, and Intermediate Level Education for analysis as representatives for the entire OES. In addition to these programs, the study also addresses the Army's concept of self-development training as a pillar of the education system. Each of these programs and concepts then serve as models for analysis from adult learning strategies. Drawing from the work of Dr. Stephen Brookfield, Ralph Brockett, and Roger Hiemstra, the study identifies five key principles that institutions should incorporate when designing curriculum that produces critical thinkers and life long learners. The study then uses these principles to assess each of the OES programs in terms of their adherence to adult learning practices for critical thinking and self-directed learning. The study reveals an education system that is slowly adopting methods for incorporating critical thinking instruction into its programs. The most significant findings in this study are in the areas of life long learning and self-directed learning, revealing that the programs in OES are doing little to nothing in fostering self-direction in its officers that allows them to continue learning outside of formal settings. These findings indicate a need for further research about levels of self-directed learning among Army officers but also demand an end to the myth that officers are inherently self-directed.				
14. SUBJECT TERMS Officer Education, Adult Learning			15. NUMBER OF PAGES 55	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT U	18. SECURITY CLASSIFICATION OF THIS PAGE U	19. SECURITY CLASSIFICATION OF ABSTRACT U	20. LIMITATION OF ABSTRACT none	

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major Matthew R. McKinley

Title of Monograph: An Assessment of the Army Officer Education System from an Adult
Learning Perspective

Approved by:

James J. Schneider, Ph.D.

Monograph Director

Kevin C.M. Benson, COL, AR

Director,
School of Advanced
Military Studies

Robert F. Baumann, Ph.D.

Director,
Graduate Degree
Programs

Abstract

AN ASSESSMENT OF THE ARMY OFFICER EDUCATION SYSTEM FROM AN ADULT LEARNING PERSPECTIVE by MAJ Matthew R. McKinley, USA, 77 pages.

Many of the current senior leaders in the Army have recognized the importance of education to Army Transformation. In this recognition, many have also used the language of adult learning practices to describe the attributes that leaders must gain through Army education. In particular, these leaders have called for critical thinkers who can respond to the complex and dynamic modern battlefield as well as life long learners who can sustain their learning throughout their careers. Critical thinking and life long learning have been the subjects of much research and practice in the field of adult education over the past seventy or eighty years, with many new discoveries in the past decade. This research and its corresponding strategies for implementation in adult education curriculum design have profound implications for the Army education system, particularly in light of the recent call for critical thinkers and life long learners. The purpose of this monograph is to examine the Officer Education System as a sub-set of Army education to determine how well OES is responding to this call and to examine some underlying assumptions upon which OES rests.

This study focuses on the Officer Basic Course, the Captains Career Course, and Intermediate Level Education for analysis as representatives for the entire OES. The focus includes a description of current and ongoing initiatives in these programs such as the Basic Officer Leader Course model, Combined Arms Staff Course, Combined Arms Battle Command Course, and the Advanced Operations Warfighting Course. In addition to these programs, the study also addresses the Army's concept of self-development training as a pillar of the education system. Each of these programs and concepts then serve as models for analysis from adult learning strategies.

Drawing from the work of Dr. Stephen Brookfield, Ralph Brockett, and Roger Hiemstra, the study identifies five key principles that institutions should incorporate when designing curriculum that produces critical thinkers and life long learners. The study then uses these principles to assess each of the OES programs in terms of their adherence to adult learning practices for critical thinking and self-directed learning.

The study reveals an education system that is slowly adopting methods for incorporating critical thinking instruction into its programs. ILE and AOWC have made the most progress in this area, while OBC and CCC have virtually no provision for successfully incorporating critical thinking instruction. The most significant findings in this study are in the areas of life long learning and self-directed learning, however. The Officer Education System has based much of its curriculum design on obsolete assumptions about the way that adults learn. OES leaves the preponderance of learning up to the individual officer and multiple supervisors, assuming that their inherent self-direction will lead them to accomplish learning objectives that support institutional needs. However, the adult education field, understanding that adults are not inherently self-directed and that their levels of self-direction vary over time, shows such an assumption to be false. Additionally, this study reveals that the programs in OES are doing little to nothing in fostering self-direction in its officers that allows them to continue learning outside of formal settings. Consequently, the pillar of self-development training in OES rests on a faulty assumption that officers will direct their own learning when in fact, they are very unlikely to do so. These findings indicate a need for further research about levels of self-directed learning among Army officers but also demand an end to the myth that officers are inherently self-directed.

Table Of Contents

Figures	v
Introduction	1
Statement of the Problem	3
Background.....	3
Scope and Limitations	6
Critical Thinking and Life Long Learning	7
Critical Thinking	8
Life Long Learning and Self-Directed Learning	10
Developing Critical Thinking and Self-direction	17
The Army Officer Education System	21
The Officer Basic Course	23
The Captains Career Course	25
Intermediate Level Education.....	27
Self Development Training	29
Analysis	32
OBC and CCC	34
ILE and AOWC	39
Summarized Analysis	44
Conclusions and Recommendations.....	47
Bibliography	52
Appendix A: OBC Critical Thinking Task.....	57
Appendix B: CCC Critical Thinking Task	59
Appendix C: Fires XXI Self-Development Training	63
Appendix D: SD Form 481: Individual Development Plan	68

Table Of Figures

Figure 1: Conceptual Model of Critical Thinking	10
Figure 2: The Officer Education System.....	23
Figure 3: BOLC Model	25
Figure 4: CCC Model	27
Figure 5: Summarized Analysis	44

Introduction

Critical thinking is a learned behavior that is underpinned by education. The Army education system, moreover, can be our most effective lever of cultural change. Many of our most important cultural shifts can trace their origins to [the] schoolhouse. A thorough review of the institutional educational system is required to assess its effectiveness at engendering critical thinking.

BG David Fastabend and Mr. Robert Simpson
*“Adapt or Die”*¹

The Army is in the midst of a furious debate about the direction of Transformation, the equipment and combat systems to support it, and the force structure to bring it all together. In the midst of this radical change and spirited debate, the Army has turned to its education system to develop leaders to navigate the uncertainty of twenty-first century combat and the complexities of organizational change. Many of the Army’s senior leaders have identified an urgent need for the qualities of critical thinking and adaptability in leaders throughout the Army. Underlying this urgent call for critical thinkers is an assumption that leaders who are not enrolled in formal education will seek information on their own as part of “self-development” and “life long learning.” The Army Officer Education System has begun addressing the need for developing critical thinkers and, in some regards, has addressed the need for life long learners by drawing from the adult education practices. The field of adult education offers a wealth of research and strategies for instruction that can help answer this urgent call. In this time when so much of the Army’s success in Transformation and on twenty-first Century battlefields rests on the education system, leveraging the strategies of adult learning may determine the success or failure of cultural

¹ BG David A. Fastabend and Mr. Robert H. Simpson, “‘Adapt or Die’, The Imperative for a Culture of Innovation in the United States Army”: 4, [paper online]; available from <http://www.army.mil/thewayahead/acpdownloads/Culture%20of%20Innovation.pdf>; Internet accessed 6 September 2004.

and educational change. An assessment of OES today and its initiatives in Transformation from an adult learning perspective will provide insight into the Army's progress in Transformation.

The purpose of this monograph is to assess current OES programs and initiatives in Transformation using guidelines established by researchers in adult education for the development of critical thinkers and life long learners. Focusing on the Officer Basic Course (OBC), the Captains Career Course (CCC), Intermediate Level Education (ILE) and the Advanced Operations and Warfighting Course (AOWC), this study examines these programs to determine their compliance with adult learning guidelines. Modified slightly for the purpose of this monograph, the following questions serve as evaluation criteria for each of the above programs in OES: Does the program incorporate critical thinking in its curriculum? What are the assessment tools for learners' performance and expected performance? Does the program specifically focus on opportunities for self-directed learning? Does the program promote learning networks and learning exchanges? Does the program provide staff training on self-directed learning and critical thinking and broaden the opportunities for implementation?² From analysis of the programs within OES this study should help determine if OES is on track to fill this urgent demand for critical thinking, life long learning officers.

The present chapter discusses the problem statement, the importance of education in Transformation, and the limitations and scope of this study. This paper has four additional chapters that address the topic. Chapter Two discusses the important role that Adult Education has played in Army education system. It also explains terms such as "critical thinking" and "self-directed learning" according to leading theorists in the field of adult education. Chapter Three briefly describes the Army Officer Education system in its current form and initiatives that have begun under Army Transformation. Chapter Four analyzes OES from an adult learning

² Brockett, Ralph, and Roger Hiemstra. "Bridging the Theory-Practice Gap in Self-Directed Learning." In *Self-Directed Learning: From Theory to Practice*, edited by S. Brookfield. New Directions for Continuing Education No. 25. (San Francisco, CA: Jossey-Bass, 1985), 37.

perspective, focusing on key principles of critical thinking and self-directed learning. Finally, Chapter Five offers conclusions and recommendations about the Army Officer Education System based on analysis from adult learning theory.

Statement of the Problem

The primary research question is: Do the individual programs within the United States Army Officer Education System (OES) have curriculum and instruction capabilities that are consistent with adult learning techniques that produce critical-thinkers and life long learners? The purpose of this paper is to identify programs in OES that are not meeting the organizational needs for critical thinking officers and life long learners and to make recommendations for improvement. It will also highlight areas in OES that require further research.

Background

Education is at the heart of organizational change. The recent call for innovation, adaptability and critical thinking in Transformation is not the first time Army leaders have identified such a need in its officers. As far back as the period between World War I and World War II at the U.S. Army's Command and General Staff College, its leaders recognized the need to allow for multiple solutions to problems and exercises. As Timothy Nenninger noted in the *Journal of Military History*,

The stress on reasonable solutions and proper procedures, rather than adherence to a single correct answer, seems consistent throughout the interwar era. The annual guidance to instructors, "Instruction Circular No. 2," for 1938 declared: "the greatest care must be used to give proper value to a workable solution although it may differ from the solution issued by the school...Great care must be exercised to avoid injuring the initiative of officers."³

³ Command and General Staff School, Instructional Circular No. 2, 1938-39, 1 July 1938, Archives, CARL, Fort Leavenworth, KS quoted in Timothy K. Nenninger, "Leavenworth and its critics:

In 1938, Army leaders recognized the need for critical thinking and self-direction before such terms appeared in educational vernacular and before strategies to develop such traits existed.

Education in Transformation

Now, however, the U.S. Army seeks to impart this way of thinking to all of its leaders, not just mid-level officers selected for the Command and General Staff School. While only one of the Chief of Staff's seventeen focus areas in Transformation, training and education are clearly at the forefront and it is in these areas that the success or failure of this Transformation will be determined. Within this all important focus area, engendering initiative, originality, and critical thinking in all leaders is the means to achieve Transformation.⁴

When describing the direction of Army education in Transformation, leaders such as the Army Chief of Staff General Schoomaker and former CGSC Deputy Commandant BG Hirai have used terms such as “critical thinking” and “life long learning” as desired traits among military professionals.⁵ Much like the leaders of 1938, today's leaders have identified the needs that Army education must meet and have left it to the education system to determine how. Fortunately, researchers in adult education have been studying these same issues for the past four decades and have developed definitions and several strategies to lead learners toward critical thinking and life long learning.

The U.S. Army Command and General Staff School, 1920-1940: in *The Journal of Military History*, Vol. 58 (Lexington, 1994), 199.

⁴ United States Army, “The Way Ahead: Our Army at War...Relevant and Ready”: 10. [paper online]; available from <http://www.army.mil/thewayahead/focus.html>: Internet accessed 6 September 2004.

⁵ BG David A. Fastabend and Mr. Robert H. Simpson, “‘Adapt or Die’, The Imperative for a Culture of Innovation in the United States Army”: 9, [paper online]; available from <http://www.army.mil/thewayahead/acpdownloads/Culture%20of%20Innovation.pdf>: Internet accessed 6 September 2004; Burlas, Joe. “Initiatives to Improve Education System that has Served the Army Well”, 1 [paper online]; available from http://www4.army.mil/ocpa/print.php?story_id_key=5885: Internet accessed 18 August 2004.

Adult Education

The field of adult education traces its roots back to the seventeenth century and it has made innumerable contributions to the social, political, and educational growth of the United States. In the past century influenced by advances in cognitive psychology, the field has identified that adults learn differently than children. Beginning in the 1920's researchers began offering theories on the unique characteristics of adult learners. Much of this research focused on the aspect of self-directed learning, also known as life long learning. Initial research indicated that adults were inherently self-directed in their learning and could take full responsibility for their own education. This theory dominated adult education for several more decades but recent research has determined that it was false. Adults are not inherently self-directed. In fact, current theories maintain that the goal of adult education is to produce self-directed, critical-thinking, life long learners. Learners do not approach education already knowing what they want to learn and how to learn it, nor do they necessarily seek knowledge of their own volition. More recent research in adult learning has focused on how to develop critical thinking skills, allowing adults to produce multiple solutions to problems and to understand their own thinking during problem solving. This research has been very popular in corporate America and has recently appeared in Army literature and curriculum as well.⁶

OES

Many recent workshops and initiatives have addressed the incorporation of critical thinking strategies in Army education curriculum, particularly in the Command and General Staff College and the Army War College. Additionally, the Army Research Institute has recently identified the need to broaden critical thinking strategies to all courses in Army education. At a

⁶ Merriam, Sharan B. and Ralph Brockett, *The Profession and Practice of Adult Education*, (San Francisco: Jossey-Bass, 1997), 135-143.

workshop titled “Training Critical Thinking Skills for Battle Command” in December 2000, the keynote speaker MG (Ret) Maggart stated: “we must define some process for inculcating critical thinking into our school systems, units and of course our leaders and soldiers in a fashion that does not disrupt an already overtaxed system.”⁷

In addition to the inclusion of critical thinking strategies in education, the Army has recognized the importance of self-development in the education system. According to 2003 Army Regulation 350-1, “the three pillars of the Army’s training and education system are: individual training and education (training in schools and through distance learning), operational assignments, and self-development training.”⁸ The regulation further expounds on each of these pillars and provides a relatively detailed account of the elements of self-development training.

Clearly the Army has identified the need for critical thinking and provided some tools to develop life long learners. However, the question remains about the adequacy of inclusion in programs in OES and implementation.

Scope and Limitations

This monograph is a discussion about the post-commissioning Officer Education System as viewed from an adult learning perspective, focusing particularly on critical thinking and self-directed learning. First, this study focuses only on the Officer Education System since it is the most recently influenced by adult learning theory. NCOES, WOES, and other Army education initiatives may also benefit from the conclusions of this study, but they are beyond the scope of this monograph. This study also excludes precommissioning programs from consideration due to the wide variance in sources and programs and the difficulty of adequately assessing them.

⁷ Sharon L. Riedel, “Training Critical Thinking Skills for Battle Command”: 20, [paper online]; available from <http://www-ari.army.mil/pdf/rr1777.pdf>; Internet accessed on 20 September 2004.

⁸ U.S. Department of the Army. AR 350-1, *Army Training and Education*. (Washington, DC: Department of the Army. 2003), 1-7.

Secondly, OES encompasses a wide array of possible topics for discussion that bear further research, one of which is instructor selection and education. The Army must examine this important area more closely, but this monograph will not address it in any detail. Finally, adult education is a diverse and complex system itself, but this monograph only draws the principles of critical thinking and self-directed learning from the field. There is much that adult learning theory has to offer to strategies of instruction and learner motivation in the classrooms, but they do not directly effect the Officer Education System as a whole. This paper hopes to identify programs within OES that can further benefit from the influence of adult learning principles and contribute to Army Transformation by developing critical thinking and self-directed officers.

CHAPTER TWO

Critical Thinking and Life Long Learning

“The Army’s involvement in the area of adult education is not new. Historically, the Army can trace the origins of this involvement to General George Washington, who in 1778 recognized the need for providing basic academic instruction to illiterate convalescent soldiers at Valley Forge.”

E. Wilds, 1938⁹

The United States Army has sustained a long symbiotic relationship with the field of adult education, drawing new theories and practices from the field for use in military education and providing learners and assessments of these practices back to the educators. In this exchange of theory and practice, definitions and terms may change according to the context in which they are used. Because of this potential for confusion, it is now useful to review current definitions of

⁹ Wilds, E. 1938 quoted in William Neugebauer Army Continuing Education System: Andragogical-Pedagogical Orientations of Education Services Officers, Education Services Specialists and Guidance Counselors, (Ann Arbor: UMI Dissertation Services, 1991), 1.

critical thinking, life long learning and self-directed learning according to the field of adult education and according to the Army.

Critical Thinking

Critical thinking is so often used in military, business, and education communities now that its meaning is in danger of being diluted or convoluted. An Internet search for sites referring to “critical thinking” produces over 3 million results, many offering multiple definitions for the term and strategies on how to achieve it.¹⁰ Prominent educators and educational theorists such as Dr. Stephen Brookfield, Susan Fischer, Richard Paul and Linda Elder have written volumes of books on the subject, each with a different understanding of what critical thinking is and how to get it. Given this wide variance in the understanding of critical thinking, it is helpful to consider the Army’s stated needs and then find definitions that most closely meet those needs. In “Adapt or Die”, BG Fastabend, articulates this need under the topic of “Critical Thinking Behavior.

Most Army schools open with the standard bromide: “We are not going to teach you what to think ... we are going to teach you *how to think*.” They rarely do. Critical thinking is both art and science. There are techniques to critical thinking, such as the careful application of logic, or the alternative application of deduction and induction. These techniques can be taught and learned.”¹¹

Fortunately, the Army Research Institute recognized the wide disparity in the understanding of critical thinking and convened a panel to address the term as it relates to the Army. One of the panel members, Susan Fischer, provided a synthesis of many of the definitions throughout the field and offered the following as a useful description of critical thinking for the Army:

“Despite differences among conceptions of CT, examination of the literature reveals a modest amount of overlap and redundancy. Among these definitions, several “themes”

¹⁰ Google; available from <http://www.google.com/search?hl=en&ie=ISO-8859-1&q=%22critical+thinking%22>; Internet accessed on 9 November, 2004.

¹¹ BG David A. Fastabend and Mr. Robert H. Simpson, “‘Adapt or Die’, The Imperative for a Culture of Innovation in the United States Army”: 4, [paper online]; available from <http://www.army.mil/thewayahead/acpdownloads/Culture%20of%20Innovation.pdf>; Internet accessed on 6 September 2004.

repeat themselves, of which we identify six. For example, many, but not all, theorists regard the ability to use *reasoning* and *informal applied logic* as central to CT. *Judgment* or *evaluation* of information or a source is a second common theme. Some theorists see judgment as the “critical” component of CT. Others make no mention of judgment in their definitions or discussions. Other themes seem to describe a state of mind rather than a skill or ability. For example, several theorists describe CT as an attitude or activity that is *reflective* or *questioning*. A few theorists describe CT as a recursive, interactive activity that involves *meta-cognition* while others simply note that CT involves some sort of *mental process*. Those who emphasize its meta-cognitive nature view CT as “thinking about thinking that serves to improve thinking.” Finally, several definitions explicitly emphasize the *purposeful* nature of CT. For these theorists, CT is not a series of aimless, random thoughts. It is distinguished from regular thinking in its goal-directed nature that is applied to serve a purpose.”¹²

Fischer’s synthesis of several definitions of critical thinking sufficiently narrowed the field to identify principles that directly relate to the Army’s expressed need for a particular kind of thinking among its officers. From this synthesis, Army researchers developed eight critical thinking skills that could be incorporated into education programs: 1. Frame the problem, 2. Recognize main point in a message, 3. Visualize plans to see if they achieve goals, 4. Construct a plausible story that ties all incidents together, 5. Recognize fallibility and bias in own opinion. 6. Generalize from specific instances to broader classes, 7. Adopt multiple perspectives in interpreting events, 8. Determine when to seek more information. The model below from the Army Research Institute encompasses these principles.¹³

¹² Fischer, Susan. “A Framework for Critical Thinking Research and Training,” in *Training Critical Thinking Skills for Battle Command. ARI Workshop Proceedings. 5-6 December 2000*, by the Army Research Institute, 35. Alexandria, VA. Army Research Institute for the Behavioral and Social Sciences.

¹³ Riedel, Sharon L. “Critical Thinking Training for Army Schoolhouse and Distance Learning”, 14: [paper on-line]; available from <http://www.hqda.army.mil/ari/pdf/august2003.pdf>; Internet accessed on 20 September 2004.

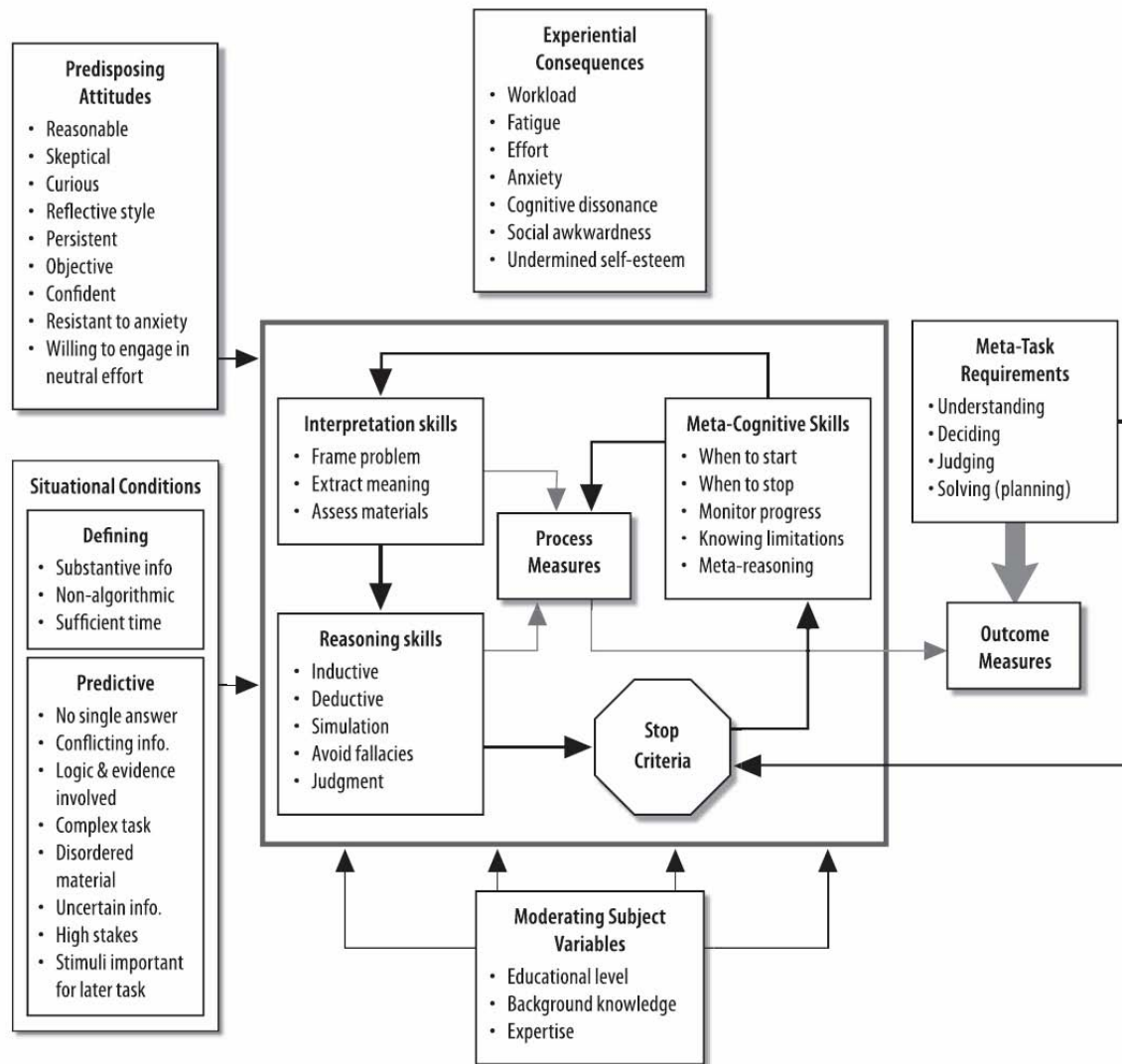


Figure 1: Conceptual Model of Critical Thinking

Life Long Learning and Self-Directed Learning

Along with a need for critical thinkers in the Army, senior leaders have also expressed a need for its officers to be “life long learners.” In an article describing one of the Army Chief of Staff’s seventeen focus areas, Brig. Gen. James Hirai, former Army Command and General Staff College deputy commanding general, acknowledged that the Army had long espoused its

commitment to life long learning but had not fully supported it with its education system.¹⁴ His comments echoed multiple references to the importance of life long learning by senior leaders such as the Army Chief of Staff, General Peter Schoomaker, Commander of the Training and Doctrine Command (TRADOC) General Kevin Byrnes, and several directors of Army education programs.¹⁵ Recognizing the risk of this term becoming yet another meaningless buzzword, the Army's Training and Doctrine Command (TRADOC) provided the following definition for life long learning:

The ability of a soldier to learn, grow and achieve technically and tactically throughout a career, wherever they serve. Life long learning begins with recruiter contact and progresses until ETS/retirement. Life long learning is a mixture of traditional schoolhouse resident education/training and education/training presented in other locations at the individual's teachable moment.¹⁶ Teachable moment – The moment in time when acquiring knowledge has the greatest impact on a person, or when it makes the biggest difference in his/her success.

While not specifically addressed in the definition, most references to life long learning also include the use of distance learning centers and web-based approaches to learning that will enable a soldier to access resources from any location with Internet capability. These resources provide opportunities for soldiers to develop professionally in order to contribute to their career goals and advancement within the Army.

TRADOC's definition for life long learning is very similar to the field of adult education's understanding of the term, but without a critical element that constitutes much of the

¹⁴ Burlas, Joe. "Initiatives to Improve Education system That Has Served the Army Well": [paper on-line]; available from http://www4.army.mil/ocpa/print.php?story_id_key=5885; Internet accessed on 18 August 2004.

¹⁵ BG David A. Fastabend and Mr. Robert H. Simpson, "'Adapt or Die', The Imperative for a Culture of Innovation in the United States Army": 9, [paper online]; available from <http://www.army.mil/thewayahead/acpdownloads/Culture%20of%20Innovation.pdf>; Internet accessed 6 September 2004; United States Army, "The Way Ahead: Our Army at War...Relevant and Ready": 10. [paper online]; available from <http://www.army.mil/thewayahead/focus.html>; Internet accessed 6 September 2004; United States Army Training and Doctrine Command (TRADOC) web site: "Leaders Perspective"; available from http://www.tradoc.army.mil/pao/Web_specials/lifelong_learning/leadersperspective.htm; Internet accessed on 20 September 2004

field's focus of research and practice, self-directed learning. According to Dr. Stephen Brookfield, a leading adult learning theorist and practitioner, "it is impossible to conceive of a life long education system that does not have some provision for assisting self-directed learners as a central component."¹⁷ However, the fact that the Army definition does not specifically include a reference to self-directed learning is not significant in itself. Chapter four in this study will examine the actual programs in OES for the presence of self-directed learning in the system. For now, accurate definitions of these terms suffices to establish a common understanding of educational terms.

Given the criticality of self-directed learning as a component of life long learning, this study must fully describe the concept as a basis for subsequent analysis. Brookfield and many others in the field define self-directed learning as a process in which learners take personal responsibility for their learning and can exercise free will in the content and form of learning. Senge, author of *The Fifth Discipline*, a popular reference among current Army leaders, developed his own term for self-directed learning. Senge described self-directed learning as personal mastery. "People with a high level of personal mastery are able to consistently realize the results that matter most deeply to them -- in effect, they approach their life as an artist would approach a work of art. They do that by becoming committed to their own life long learning."¹⁸ These definitions represent the current understanding of self-directed learning, but do not reflect the history of the concept and initial assumptions that still haunt practitioners of adult education, particularly in Army education. For this broader understanding, this study must turn back to adult education in the 1920's.

¹⁶ TRADOC web site: "Definitions"; available from http://www.tradoc.army.mil/pao/Web_specials/life_long_learning/definitions.htm: Internet accessed on 20 September 2004.

¹⁷ Brookfield, Stephen. *Self-Directed learning: From Theory to Practice*. (San Francisco: Jossey-Bass. 1985), 77.

¹⁸ Senge, Peter M. *The Fifth Discipline*. (New York: Currency Doubleday. 1990), 7.

In the 1920's, educational theorists began to examine the unique characteristics of adult learners that distinguished them from children. Until that time, educators assumed that adults and children learned identically and were equally dependent on teachers for gaining knowledge. However, with the growing pool of research from the field of psychology and its influence on the field of education, theorists developed new ways of approaching adult learning. One of the leading theorists of the time was Eduard C. Lindeman, whose research led him to identify general characteristics of adult learners. Among other characteristics, Lindeman noted that unlike children, adult learners were inherently self-directed and they could be fully in control of their own learning. Adults were less dependent on teachers for their learning and used their greater experience in life to determine the course of their own learning. He referred to this uniquely adult way of learning as "andragogy" which was distinct from "pedagogy," the way children learned.¹⁹ This unchallenged belief remained a central assumption of the field of adult education for about four decades and reached its zenith in Dr. Malcolm Knowles' work, *The Modern Practice of Adult Education: Pedagogy Versus Andragogy*. In this work, Knowles offered strategies of instruction for educators of adults. These strategies were based on Lindeman's descriptions of andragogy and pedagogy and further entrenched the belief that adult learners were inherently self-directed and could be in charge of their own learning.

Knowles' assumptions further dominated the field of adult education until he, himself, along with theorists such as Spear, Brockett and Hiemstra, Grow, and Brookfield challenged them during the 1980's and 90's. Their research revealed that adults were clearly dependent on others for their education in many situations and they were often reluctant to determine the direction of their own learning. They also found that when adults desired to direct their own learning, they were often incapable of doing that without first being dependent on a teacher for their initial

¹⁹ Lindeman, Eduard and Martha Anderson. *Education Through Experience*. (New York: The Workers Education Bureau Press. 1927), 2-4.

learning. As their experience and knowledge grew, they gradually moved from dependence on teachers to greater autonomy in their learning. Most of these theorists now describe self-direction as a series of stages rather than a preexisting condition in adults.²⁰ One of the most widely accepted models for self-directed learning came from Dr. Gerald Grow, who described self-direction in four distinct stages.

Stage 1: Learners of low self-direction who need an authority figure (a teacher) to tell them what to do.

Stage 2: Learners of moderate self-direction who are motivated and confident but largely ignorant of the subject matter to be learned.

Stage 3: Learners of intermediate self-direction who have both the skill and the basic knowledge and view themselves as being both ready and able to explore a specific subject area with a good guide.

Stage 4: Learners of high self-direction who are both willing and able to plan, execute, and evaluate their own learning with or without the help of an expert.

Grow emphasized that self-direction was not an all or nothing concept. He asserted that learners might be in different stages of self-direction depending on the subject or the context of learning. Throughout life, adults could go back and forth between stages of self-direction with differing dependence on teachers and experts to assist their learning. He, like many of his contemporaries, also began to develop strategies to assist educators in moving learners from low self-direction to high levels of self-direction.²¹

However, self-directed learning theory does not provide a complete sequential model that educators and organizational leaders can apply to guarantee the production of scores of life long learners. Many theorists are still trying to answer the question of whether true self-direction is even possible in an institutional or organizational setting. In Senge's discussion of the discipline of personal mastery, he writes:

Organizations can get into considerable difficulty if they become too aggressive in promoting personal mastery for their members. Still many have attempted to do just that by creating compulsory internal personal growth training programs. However well-intentioned, such programs are probably the most sure-fire way to impede the genuine spread of

²⁰ Merriam, Sharan and Caffarella, Rosemary. *Learning in Adulthood, a Comprehensive Guide*. 2nd ed. (San Francisco: Jossey-Bass. 1999), 288.

²¹ Ibid, 303.

commitment to personal mastery in an organization. Compulsory training, or “elective” programs that people feel expected to attend if they want to advance their careers, conflict directly with freedom of choice.²²

Senge is not alone in his suspicion that self-development programs that focus on organizational learning objectives may be doomed to failure. Self-directed learning research has shown that adults move from dependence to independence in learning when the subject is of personal interest to them. Millions of adults enroll in community college courses for gourmet cooking, hunter safety, or scuba diving, as examples, but only because these are personal learning objectives. However, present research is inconclusive as to the degree that adults pursue organizational learning of their own volition. In other words, while an officer who wants to know more about fly fishing may be inclined to enroll in a seminars, buy books, and watch videos about it on his own time, it is questionable whether or not he would do the same for a subject such as force management. Further research may provide answers to such questions and those answers may have a profound impact on the future of organizational learning, but as of this study, the question remains unanswered. Therefore, the current strategies for self-direction must serve as the basis of assessment for education systems and institutions.

In terms of educational theory, models and strategies of self-direction are quite recent, particularly when compared to the four decades of dominance of andragogy according to Lindeman and Knowles. Because of this relative novelty, many adult learning institutions have not embraced self-direction and still view adult learners through the 1927 lens offered by Eduard Lindeman. As this study will show in chapter four, the Army may very well be one of those institutions that has not fully embraced self-directed learning, despite its importance to life long learning.

Before leaving the discussion of self-directed learning, it is useful to examine theories of participation. In Army education, most participation is often mandatory for continued service and

²² Senge, Peter M. *The Fifth Discipline*. (New York: Currency Doubleday. 1990), 172.

promotion, but that fact does not lessen the importance of understanding the motivations of learners and the resulting influence on learning objectives. Reasons that adults participate in education play an important role in the success or failure of educational initiatives, particularly in higher cognitive skills such as critical thinking and self-directed learning. A review of theories of participation will provide depth to the analysis of OES from the adult learning perspective

In 1961, Cyril Houle, a leading adult educator, wrote the seminal work *The Inquiring Mind* to open the discussion of why adults participate in education. His research was minimal and his theories were based mainly on his experiences as an adult educator and on the anecdotal evidence of his peers. Despite the apparent weakness of his approach, Houle developed three categories of participation for adult learners that have stood the test of time for over forty years.²³ Other researchers such as Roger Boshier used Houle's theories as a springboard for further research, but their findings were little more than variations of the same categories that Houle identified. Houle noted that adult learners were either goal-oriented, learning-oriented, or activity oriented in their approach to education. Boshier expanded these groups into the following six groups:

1. Social relationships. This factor reflects participation in order to make new friends or meet members of the opposite sex.
2. External expectations. These participants are complying with the wishes and directives of someone else with authority.
3. Social welfare. This factor reflects an altruistic orientation; learners are involved because they want to serve others or their community.
4. Professional advancement. This factor is strongly associated with participation for job enhancement or professional advancement.
5. Escape/stimulation. This factor is indicative of learners who are involved as a way of alleviating boredom or escaping home or work routine.
6. Cognitive interest. These participants, identical to Houle's learning oriented adults, are engaged for the sake of learning itself.²⁴

Of these six categories, Army officers participate in programs within OES for professional advancement and external expectations. Within this mandatory participation,

²³Houle, Cyril.O. *The Inquiring Mind*. (Madison: The University of Wisconsin Press. 1961),15.

officers may approach learning opportunities with a cognitive interest, since these categories are not mutually exclusive, but clearly, all officers participate in OES because they must in order to continue successful careers. Officers who approach programs in OES with a cognitive interest begin with a different type and level of motivation than officers who participate only because it is required for successful advancement in their careers. This fact will be important to recall later when this study examines some of the underlying assumptions about life long learning on which OES rests.

Developing Critical Thinking and Self-direction

While common understandings of terms and theories is necessary for analysis, this study depends mostly on the analysis of OES according to strategies of adult learning, specifically as they relate to critical thinking and self-directed learning. A great deal of critical thinking and self-directed learning theory focuses directly into the classroom and to the relationship between teacher and learner. At the same time, researchers have also identified broader principles that institutions that seek to encourage critical thinking and self-direction may use to guide them in curriculum design. With the ongoing discussion about critical thinking in the education field, finding consensus on how to achieve these skills would appear nearly impossible at this time. This is particularly true when critical thinking may have different meanings according to the context in which it is applied. On the other hand, self-directed learning has been the focus of educational research for over seventy years and at this point; the field has reached consensus on the ways to develop it. For both sets of skills, however, researchers have found guiding principles that institutions may use to assess an their commitment to fostering critical thinking and self-directed learning. These principles are a compilation of research from several respected educators and theorists and they must be applied with the understanding that they are not a

²⁴Merriam, Sharan and Caffarella, Rosemary. *Learning in Adulthood, a Comprehensive Guide*. 2nd ed. (San Francisco: Jossey-Bass. 1999), 55.

“Go/No Go” evaluation. The following principles serve to assist institutions on focusing on critical thinking and self-directed learning when, in the case of the Army, these are presented as core competencies required of an education system.

According to Brookfield, Brockett, and Hiemstra, educational institutions should adhere to these principles to facilitate self-direction and critical thinking in their students:

1. The program should incorporate critical thinking in its curriculum.
2. The program must have assessment tools for learners’ performance and expected performance in critical thinking.
3. The program should specifically focus on opportunities for self-directed learning.
4. The program should promote learning networks and learning exchanges.
5. The program should provide staff training on self-directed learning and critical thinking and broaden the opportunities for implementation.²⁵

The first principle is self-evident in developing critical thinkers, but even with the surge in emphasis on critical thinking, not all organizations have embraced it in formal learning opportunities. For this reason, the first question that an institution must ask when examining its own commitment to critical thinking is whether or not it is an integral part of the curriculum.

Incorporating critical thinking into curriculum does not ensure that an institution’s curriculum will produce critical thinkers, however. As with any other type of learning, there must be some form of assessment that allows learners to improve and that allows institutions to determine the adequacy of instruction. Assessment for such skills as critical thinking is difficult due to the lack of consensus on what constitutes critical thinking and what produces it. This difficulty is further exacerbated by the quantitative culture of the Army that demands numerical

²⁵ Brockett, Ralph and Roger Hiemstra. "Bridging the Theory-Practice Gap in Self-Directed Learning." In *Self-Directed Learning: From Theory to Practice*, edited by S. Brookfield. New Directions for Continuing Education No. 25. (San Francisco, CA: Jossey-Bass, 1985), 37. And Roger Hiemstra. "Self-Directed Adult Learning: Some Implications for Practice." March 1982. (ERIC Document Reproduction Service No. ED 262 259).

proof of improvement rather than the qualitative assessments more appropriate to social sciences and critical thinking skills. Despite this difficulty, ARI recently developed the eight skills for critical thinking that were presented earlier in this chapter. Such skills may differ depending on the organization, but for the Army these skills may be appropriate given its definition and application of critical thinking. Merely identifying these skills is not enough, according to education researchers. These skills must be present in the assessment of performance in order to allow learners to improve and to assess the effectiveness of the institution's program. In Chapter four this study will examine how well the Army has incorporated these skills into its assessment.

Just as critical thinking must be present in the curriculum in order to develop this skill in its students, institutions must also ensure to specifically focus on opportunities for self-directed learning. This principle is largely dependent on the underlying assumptions that institutional leaders have about their adult learners. If they operate under the andragogical assumptions of Lindeman and Knowles, this principle will appear redundant because they will believe that adult learners are inherently self-directed and therefore do not need to focus on fostering this skill. Most likely, however, the institution may be unaware of the power of self-directed learning. In the Army's case, senior leaders have expressed the importance of life long learning in OES and have shown their awareness of its power. What remains to be seen is whether programs in OES exhibit andragogical assumptions or a true incorporation of self-directed learning practices. An example that would indicate an understanding of self-directed learning would be the presence of independent study in the program. This independent study would include the provision for student autonomy in subject choice and a gradual shift from instructor dependence for knowledge to student independence.

The fourth principle for institutions to follow in developing self-directed learners is that programs should promote learning networks and learning exchanges. When educational theorists originally developed this principle, the Internet was only in its infancy. Just the same, they recognized the importance of networks that extended beyond the classroom to allow learners to

continue directing their learning and sharing resources with fellow learners. Now, in the age of the Internet, this principle has migrated to become a central element to many learning programs. The Army has fully embraced distance learning and web-based learning in its education system, as chapter three will show. However, while the Army as a whole has recognized the utility of the Internet, however, this study must examine programs within OES to determine how well they are promoting this essential aspect of successful self-directed learning. It will also be important to distinguish between learning exchanges and networks and self-directed learning itself. These networks are essential elements of self-directed learning, but their presence in a program alone does not constitute the presence of self-directed learning.

The fifth principle for institutions is arguably the most important. Institutions must educate their staffs on critical thinking and self-directed learning in order to properly develop these skills in their students. For the Army, instructor selection and certification continues to be a topic of debate in the balance between maintaining quality officers as instructors while also preserving their eligibility for promotion to senior ranks.²⁶ This study will not address instructor quality but will focus on instructor training that allows for the effective incorporation of critical thinking and self-directed learning in OES programs. Certainly, the quality of the instructor has a direct influence on the success of any initiative that reaches into the classroom, but that debate must continue in circles outside the scope of this monograph. The question this principle seeks to answer is whether programs in OES provide for the education of its instructors on critical thinking and self-directed learning. Without adequate adherence to this principle, the other four principles are fairly meaningless. Critical thinking and self-directed learning both rooted in student freedom of choice, democratic thinking and student autonomy. These qualities can challenge the traditionally hierarchical and rank-conscious instructor model so familiar to military

²⁶ United States General Accounting Office. "Status of Recommendations on Officers' Professional Military Education." (Washington, D.C.: United States General Accounting Office. 1991), 11.

officers. Without adequate education on the strategies for instruction and the potential effects of improved skills in these areas, instructors may inadvertently discourage critical thinking or reject student autonomy, thereby disrupting the Army's need for such characteristics in its officers.

Army education has enjoyed a long association with adult education and both have reaped the rewards of this association. However, this association has not always produced a common understanding of terms, theories, and practices. In the midst of OES Transformation, the Army has drawn once again from the field of adult education for terms and strategies to lead it toward its organizational goals. The Army has slightly altered these borrowed terms and strategies to better fit its unique requirements, but the theories behind them are shared with the rest of adult education. Now, having established the common foundation of language and practice, the next chapter will provide an overview of OES as it begins to transform. That overview will then lead to analysis that draws from the principles described earlier in this chapter.

CHAPTER THREE

The Army Officer Education System

As part of Transformation, the Army's senior leaders have indicated that the Army must become a "learning organization," following Peter Senge's model in *The Fifth Discipline*. According to Senge, "Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning. But without it no organizational learning occurs."²⁷ Part of the Army's plan to become a learning organization is to transform its education system to focus more on individual learning. This study will describe programs within the Officer Education System in Transformation and outline initiatives for future changes.

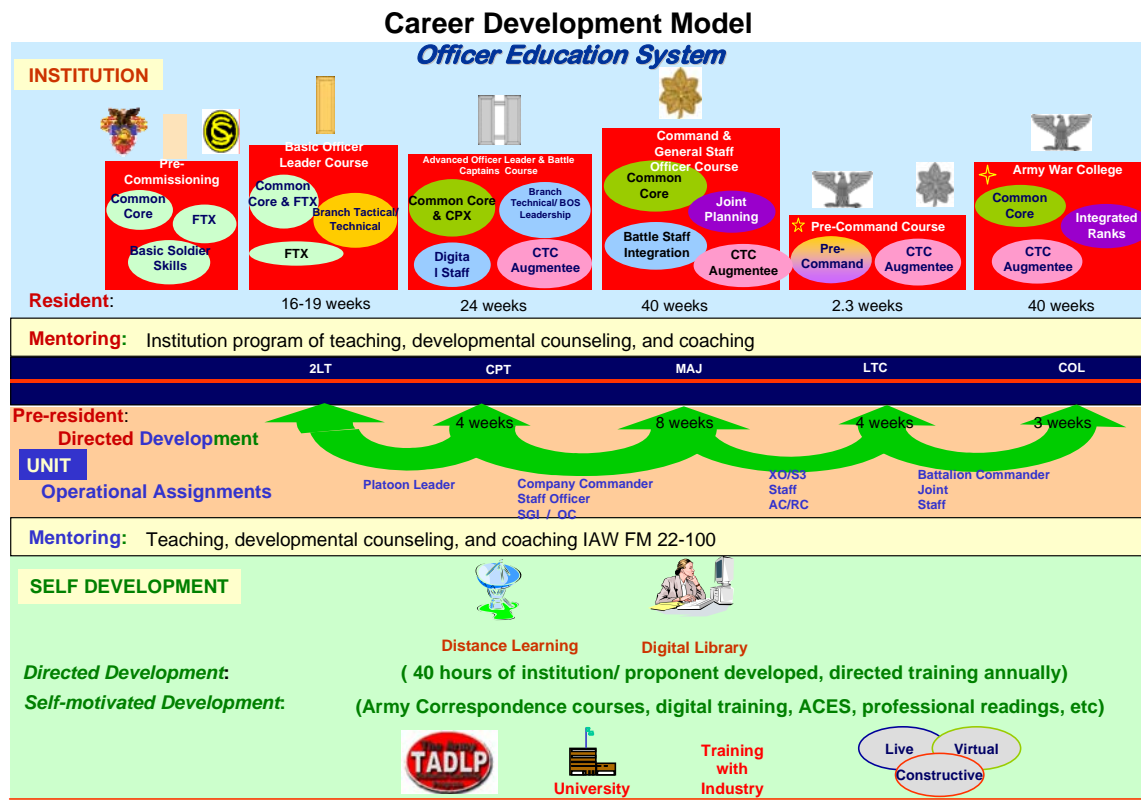
²⁷ Senge, Peter M. *The Fifth Discipline*. (New York: Currency Doubleday. 1990), 139.

The Army is a critical element of one of the largest adult education programs in the world, and it has long taken the mission of training and educating its soldiers seriously.²⁸ As noted earlier, the Army can trace its training and education lineage back to the Revolutionary War. Over the almost two hundred and thirty years since then, the education system has adapted to the needs of the Army and to educational advancements in the civilian world. In more recent times the Army developed a framework of three pillars of the training and education system and helped define roles and responsibilities for the execution of its programs. These pillars are individual training and education, operational assignments, and self-development training. This study will explore portions of these pillars in detail later, particularly the pillar of self-development and its relationship to the concept of life long learning. First, however, it is important to focus on the first pillar, which contains the institutional programs of the Officer Education System.²⁹

The Officer Education System is composed of precommissioning education, the Officer Basic Course (OBC), the Captains Career Course (CCC), Intermediate Level Education (ILE), the Advanced Military Studies Program (AMSP), the Army War College, the Advanced Operational Arts Studies Fellowship (AOASF), and the Pre-Command Courses (PCC). These sequential courses are designed to provide officers with a mix of branch specific and branch immaterial education and training that lead officers from initial entry to the highest levels of rank and responsibility. (See Figure 2 for description of current OES and OES in Transformation³⁰) Under the three pillar design of OES, operational assignments and self-development training bind these institutional programs together to match the TRADOC definition of life long learning. This study

²⁸ Kime, Dr. Steve and Dr. Clinton Anderson. "Contributions by the Military to Adult and Continuing Education" [paper on-line]; available from www.fla-acme.org/handbook.htm; Internet accessed on 20 September 2004.

²⁹ U.S. Department of the Army. AR 350-1, *Army Training and Education*. (Washington, DC: Department of the Army. 2003), 1-9.



will focus only on OBC, CCC, and ILE and their incorporation of critical thinking and life long learning. These three programs are at the heart of OES Transformation and will be useful in assessing the Army's progress from an adult learning perspective.

Figure 2: The Officer Education System

The Officer Basic Course

The Officer Basic Course is an officer's first course following graduation from a commissioning source. Historically this fourteen to nineteen week course has been an officer's introduction to his or her branch along with core requirements dictated by the head of OES, the deputy commandant of the CGSC. Each branch school designed its own OBC to focus mostly on branch specific training to prepare lieutenants for their first duty assignments, with little external

³⁰ United States Field Artillery School Directorate of Training and Doctrine web site. "Fires XXI" [paper on-line]; 2-2; available from <http://sill-www.army.mil/FDIC/default.htm>; Internet accessed on 12 November 2004.

influence on course design other than common core requirements. The fourteen to nineteen weeks of OBC have traditionally been resident courses taught at their respective branch training centers (e.g. Infantry OBC at the Infantry School at Fort Benning; Field Artillery OBC at Fort Sill). In recent years, Army leaders have been scrutinizing OBC to find a way to balance branch specific training with more emphasis on common core skills. The result of this scrutiny was a new course design called the Basic Officer Leader Course (BOLC). BOLC is a three-phase course that includes pre-commissioning as phase I, a common leadership experience as phase II, and branch specific training as phase III. A distinct departure from the traditional OBC is the six week phase II training that officers will attend at a central location that is independent of their branch training center. The purpose of this phase is to provide all officers with the basic soldier and leadership skills common to all officers regardless of branch. Phase III will closely resemble the traditional OBC but is generally shorter and almost entirely devoted to branch specific training. The first pilot course began in 2000 and BOLC will be fully implemented across the Army in Fiscal Year 2006.³¹ (See Figure 3 for a description of BOLC)

³¹ Riedel, Sharon L. "Critical Thinking Training for Army Schoolhouse and Distance Learning", 18: [paper on-line]; available from <http://www.hqda.army.mil/ari/pdf/august2003.pdf>; Internet accessed on 20 September 2004; and United States Army Signal School. "Concept for Leader Development Campaign Plan": [briefing on-line]; available from <http://www.gordon.army.mil/symposium/2002/2002pri/briefings/OCOS/CO%20Workshops/Officer%20PD%20Workshops/02%20OES-Mosley.pdf>; Internet accessed on 12 November 2004.



The BOLC Model

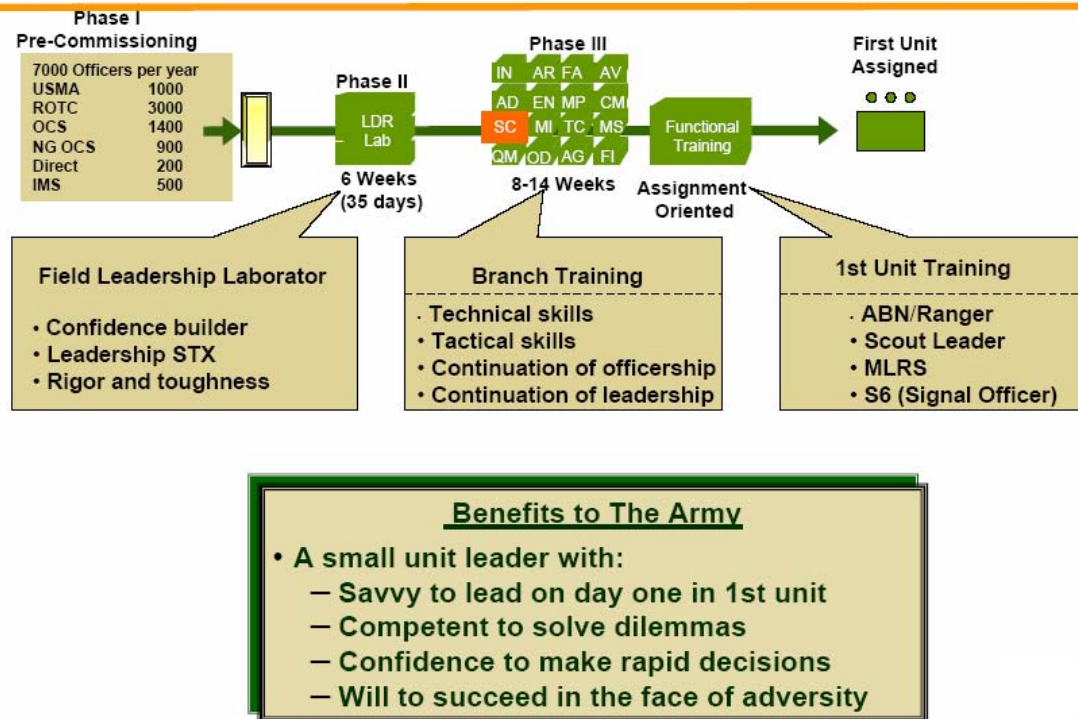


Figure 3: BOLC Model

The Captains Career Course

Following the OBC/BOLC at about three years of commissioned service, officers attend the Captains Career Course. CCC was originally designed to prepare junior captains to command company-sized units and to operate on brigade and battalion staffs. Before Transformation, CCC (also known as the Officer Advanced Course) had been a twenty-four-week resident course at each of the branch schools. At the time of this study, CCC is in the midst of transforming to include instruction previously provided by the Combined Arms Services Staff School (CAS3) and distance learning to replace resident instruction.³² Under the new design, CCC will be divided into the Combined Arms Staff Course (CASC) and the Combined Arms Battle Command Course

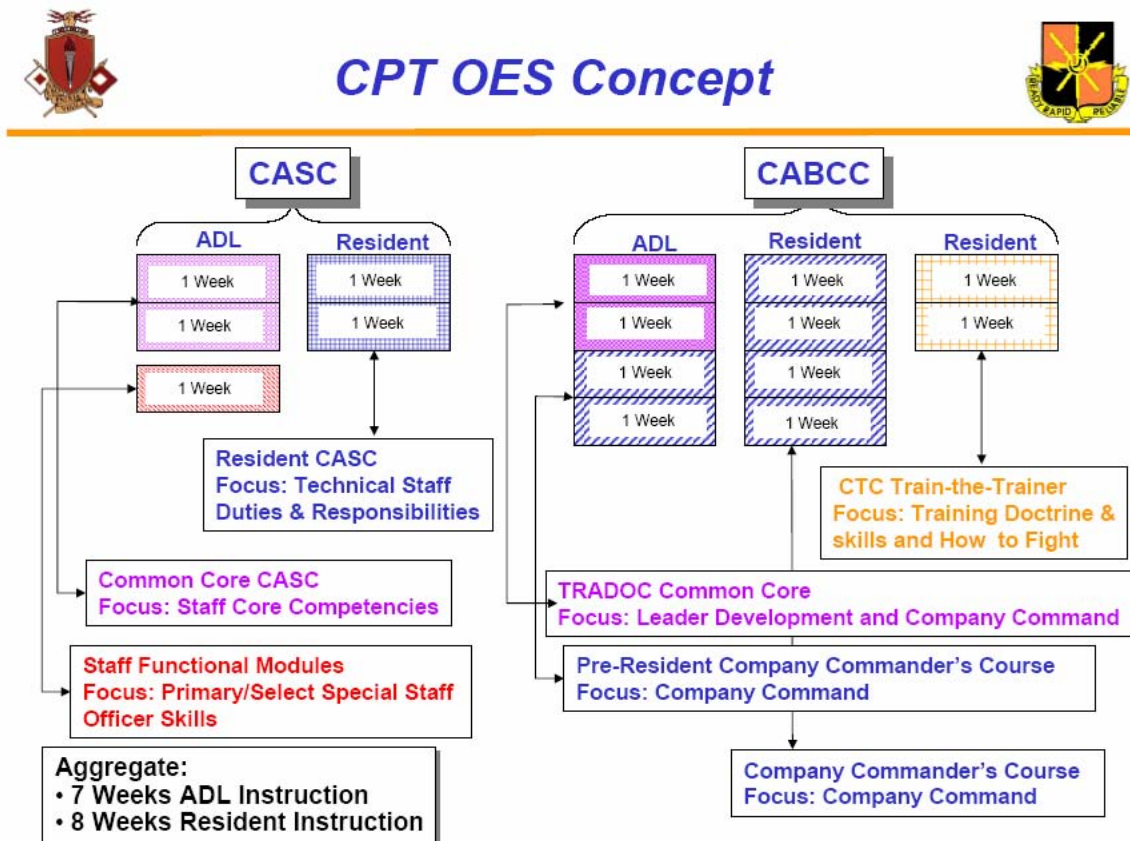
³² U.S. Department of the Army. TR 351-10, *Institutional Leader Training and Education*. (Fort Monroe, VA: Training and Doctrine Command. 1997), 18.

and will consist of seven weeks of Army Distance Learning (ADL) and eight weeks of resident instruction. Officers will complete the ADL portion while continuing to serve in operational assignments, relying on unit leaders to allow them time to complete their requirements before attending the resident portion. Currently, ADL programs are in the midst of development and CCC cannot reach full implementation until these programs are complete. Resident instruction will continue to occur at the traditional branch training centers but eventually this course will be temporary duty (TDY) with a return to operational assignments rather than as a permanent change of station (PCS). When implemented, this TDY model will support personnel initiatives that seek to stabilize officers and families longer at installations during schooling and deployments. Two weeks of CABCC will also include an experiential Combat Training Center (CTC) leadership course. CASC and CABCC will maintain the same general focus as the traditional CCC of preparing captains for company command and staff positions at the brigade and battalion level.³³

(See Figure 4 for a description of CCC)

³³ United States Army Signal School web site. "Training Update"; available from <http://www.gordon.army.mil/AC/Wntr02/tngupdt.htm>; Internet accessed on 12 November 2004; and "Concept for Leader Development Campaign Plan": [briefing on-line]; available from <http://www.gordon.army.mil/symposium/2002/2002pri/briefings/OCOS/CO%20Workshops/Officer%20PD%20Workshops/02%20OES-Mosley.pdf>; Internet accessed on 12 November 2004.

Figure 4: CCC Model



Intermediate Level Education

After CASC/CABCC, the next formal education for an officer is at the Command and General Staff College. The forty-week course, formerly known as the Command and General Staff Officers Course (CGSOC), is now a twelve-week course called Intermediate Level Education (ILE). Presently fifty percent of an officer year group attends resident ILE between the tenth and thirteenth year of active commissioned service while the remaining fifty percent complete the course through non-resident studies. Starting in the fourth quarter of fiscal year 2005, all officers selected for promotion to major will attend ILE either in residence at CGSC or distance education campus sites.

ILE Common Core curriculum specifically designed to establish a common officer culture grounded in leadership, Army full-spectrum warfighting in joint and multinational contexts, military history and critical reasoning/creative thinking. A common core is the foundation for all field-grade officers, while post-core education of varying length by branch, career field and functional area, rounds out the ILE concept.³⁴

ILE includes instruction in blocks of joint and multi-national operational warfighting, leadership, military history, and critical reasoning/creative thinking. The course culminates with a week-long capstone exercise set in an operational headquarters level scenario.

Following ILE all operations career field officers will attend a follow-on seven-month Advanced Operations Warfighting Course (AOWC) at CGSC while other career fields will attend functional area equivalents. When fully implemented, operations career field officers will continue to attend ILE and AOWC as a PCS, while other career field and functional area officers will only attend the twelve-week ILE in a TDY status.³⁵ This new model of the former CGSOC is the field grade equivalent to CASC and CABCC, preparing operational career field officers for battalion and brigade command and staff positions, while providing tailored education for other career fields according to their requirements. The information operations, institutional support and operational support career fields are still developing equivalent courses to AOWC as follow-on courses for ILE, leaving AOWC as the only course available for analysis in this study.³⁶

AOWC is focused on educating officers as command-capable brigade and battalion level commanders with advanced competencies as staff leaders to serve at all levels up to echelons-above-corps.

b. This focuses the 480 contact hours and 19 days of simulation-driven exercises on three integrated leader development areas: 1) a common-to-all-students war fighting curriculum that addresses commandership, leadership, history, full-spectrum war fighting and staff operations, 2) operationally-focused studies on functional areas (Operations, Operational Support, Operational Sustainment) and on branch and primary staff functions, and 3)

³⁴United States Army Command and General Staff College, Directorate of Academic Operations web site. "Curriculum and Faculty"; available from https://cgsc2.leavenworth.army.mil/dsa/ile/curr_and_fac.asp; Internet accessed on 20 September 2004.

³⁵ *Army Logistician*. May-June 2003. "Officer Education System to be Revamped", 39; and United States Army Force Stabilization web site; available from <https://www.stabilization.army.mil/faqs.htm>; Internet accessed 12 November 2004.

³⁶United States Army Human Resources Command web site. "Career Field Designation"; available from <https://www.perscom.army.mil/opfamdd/CFD.htm>; Internet accessed on 12 November 2004.

specialized studies (Advanced Joint Operations, Special Operations, Additional Skill Identifier (ASI) Qualifications, Masters of Military Arts and Sciences, Independent Studies and Electives).³⁷

AOWC is in its second full year of implementation and offers a useful model for assessment in the midst of Transformation. Most notably in terms of this study, AOWC includes the Advanced Applications Program (AAP), which requires students to take four to five electives or, on a case by case basis, an independent study.³⁸ This program indicates the potential for self-directed learning and will be considered in later analysis. In chapter four, this study will examine these elements of self-directed learning within AOWC and critical thinking instruction in ILE according to the definitions and principles from chapter two.

Self Development Training

When addressing the Army's need to develop life long learners, self-development training, the third pillar of the Army Education system, must be central to the discussion. This pillar, by definition, bears equal weight in an officer's education with individual training and education and operational assignments. In addition, by definition, it is a distinct and separate realm of learning from the other two pillars. The responsibility for ensuring that this pillar upholds its share of the weight of officer education falls on the officer and his supervisor. In the following examination of self-development training, the influence of adult education theories and practices is clear.

Self-development is a planned (competency-based) process that individuals use to enhance previously acquired skills, knowledge, and experience. The process enhances readiness and the potential for progressively more complex and higher level assignments. Self-development focuses on maximizing individual strengths, minimizing individual weaknesses, and achieving individual goals. Self-development is a joint effort that involves the commander or supervisor and the individual. Self-development

³⁷ United States Army Command and General Staff College, Directorate of Academic Operations web site. "Curriculum and Faculty"; available from https://cgsc2.leavenworth.army.mil/dsa/ile/curr_and_fac.asp; Internet accessed on 20 September 2004.

³⁸ United States Army Command and General Staff College Circular 12-1 -- Chapter 7 [booklet online]; available from [http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1\(04\)/Cir12-1ch7.asp](http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1(04)/Cir12-1ch7.asp); Internet accessed on 26 October 2004.

actions include: Self-development actions are structured to meet specific individual goals and needs. Developing and executing a self-development action plan that provides a clear path for achieving developmental goals. Immediate goals are remedial and focus on correcting weaknesses that adversely impact on the individual's performance in the current duty assignment. Near-term goals focus on attaining and refining the skills, knowledge, and experience needed for the next operational assignment. Long-range goals focus on preparing the individual for careerlong service. Goals are supported by progressive and sequential actions to improve performance and achieve maximum growth and potential.³⁹

The Army's description of self-development closely matches the field of adult education's description of self-direction as a process that assists a learner in meeting individual learning goals. Self-development is learning that takes place outside formal educational institutions such as OBC, CCC, and ILE and occurs while officers are serving in operational assignments. In the Field Artillery School's description of its "Fires XXI" curriculum, one chapter includes an explanation of self-development training that breaks self-development into two types. The first type, "directed self-development", requires a great deal of institutional and leader involvement to ensure that an officer completes the training. Some of the examples of directed self-development training are: Prerequisite training prior to resident training that will usually be through distance learning. Assignment related training to qualify a soldier for a new duty. College/vocational courses related to a specific duty. An example would be technical writing for a newly assigned operations NCO. Web-based sustainment training. Additional Skill Identifier (ASI)/functional courses. The second type, "self-motivated development", places the responsibility for learning on the individual officer with minimal leader and institutional involvement. Some examples of this type are: College/vocational courses that leads to degrees, certificates and licenses. Professional reading from the Chief of Staff of the Army's reading list. The Army Correspondence Course Program (ACCP) that provides a variety of MOS specific courses.

³⁹ U.S. Department of the Army. AR 350-1, *Army Training and Education*. (Washington, DC: Department of the Army. 2003), 7.

The critical element of self-development training is the self-development plan that an officer designs with the assistance of his supervisor. After identifying learning needs through self-assessment, the officer makes a contract with his supervisor during professional counseling and uses periodic counseling to ensure that he continues to progress. Certainly, this self-development plan depends on effective, regular counseling, and that is a continuing weakness in the officer corps.⁴⁰ Educators such as Daniel Pratt discuss the role of a mentoring and the "apprenticeship" teaching perspective in *Five Perspectives on Teaching in Adult and Higher Education*.⁴¹ His research provides an excellent resource for those seeking solutions to problems in the Army counseling program. These solutions through the apprenticeship model may play important roles in leader development, but this approach cannot bear the weight of the education system by itself. Mentoring and apprenticeship place an inordinate amount of educational responsibility on leaders who are unlikely to be professional educators that are poorly suited by duty requirements or training to act as educational mentors. Such a discussion is best left for another study, however. Ultimately, poor counseling among officers and supervisors indicates that the comprehensive self-development plan described in Army regulations may only exist on paper. More importantly, however, even on paper there is a notable distinction between the description of self-development training in Army regulations and self-directed learning according to adult learning. While Army regulations discuss assisted learning and individual responsibility, they do not include any discussion of moving learners from dependence toward independence. This developmental approach is at the heart of self-directed learning strategy and its omission

⁴⁰ Army Research Institute, "Survey Report: Survey on Officer Careers 2000", September 2000. Report No. 2000-11 Washington D.C. in Williams, LTC Marvin. "The Relationship of the Officer Evaluation Report to Captain Attrition". Monograph, United States Army Command and General Staff College, School of Advanced Military Studies, 2001.

⁴¹ Pratt, Daniel. *Five Perspectives on Teaching in Adult and Higher Education*. (Malabar, FL: Krieger Publishing Company. 1998), 83.

from Army regulations governing officer education highlights a point that this study will examine in more detail in chapter four.

CHAPTER FOUR

Analysis

Analysis: The very word conjures up visions of graphs, charts and spreadsheets of numbers with statistical significance and probabilities of correlation. Numbers make us comfortable and allow us to establish a sense of control over our environment. Educational issues do not lend themselves to cold statistical analysis; rather they are best expressed in the descriptive language of qualitative analysis. Terms such as critical thinking, life long learning, and self-directed learning defy quantitative identification. They are not useful to the Army because of their quantity, but because of their quality. In this light, this study analyzes OES according to theory as much as it does according to practice. The questions leading this analysis seek to reveal underlying theories and assumptions that support the respective programs in OES. The mere presence of critical thinking and self-directed learning concepts in curriculum does not constitute the proper adherence to adult learning theory and practice. These concepts are about ways of thinking more than they are about tangible products. Qualitative analysis in research, particularly in the statistically driven Army, meets regular resistance by those who demand accountability and numerical assessment in education.⁴² Nonetheless, the following analysis is qualitative because it is the most appropriate method to assess OES from an adult learning perspective.

In the course of this analysis, these questions will help reveal the answers to the broader question of the relationship of OES to current adult learning theory and practice. Does the program incorporate critical thinking in its curriculum? What are assessment tools for learners' performance and expected performance? Does the program specifically focus on opportunities for

⁴² Fraenkel, Jack R. And Norman E. Wallen. *How to Design and Evaluate Research in Education*. 5th ed. (New York: McGraw-Hill. 2003), 16.

self-directed learning? Does program promote learning networks and learning exchanges? Does program provide staff training on self-directed learning and critical thinking and broaden the opportunities for implementation?⁴³ These questions will lead to answering two broader questions: What assumptions do the programs make about their learners and is the third pillar of self-development carrying its weight in OES?

Before examining the individual programs in OES, a review of the current regulations governing OES is required. According to AR 350-1 and TRADOC Regulation 350-10, OES appears to have some understanding of self-directed learning and its incorporation into curriculum design. In fact, the questions of critical thinking and self-directed learning appear to be answered quite succinctly in the following paragraph from both regulations:

Small group instruction. Small group instruction shifts the teaching methodology from "what to think" to "how to think" and places learning responsibility on the student through group participation and assignments as discussion leaders. Fosters self-learning through group participation.⁴⁴

However, upon closer examination of this sole reference to these concepts and a reminder of earlier definitions, this regulation demonstrates a fallacy that runs throughout its programs. Giving students an assignment and then breaking them down into groups for execution does not constitute "self-learning". The critical piece of self-directed learning that distinguishes it from traditional learning is that the learner transitions from dependence on the teacher in learning objectives to setting his own objectives and means to reach them. Self-directed learning is a process in which learners take personal responsibility for their learning and can exercise free will in the content and form of learning. While this is not necessarily possible at the beginning of a course, it is the most important outcome of formal education by the end of the course. Learners

⁴³ Brockett, Ralph and Roger Hiemstra. "Bridging the Theory-Practice Gap in Self-Directed Learning." In *Self-Directed Learning: From Theory to Practice*, edited by S. Brookfield. New Directions for Continuing Education No. 25. (San Francisco, CA: Jossey-Bass, 1985), 37.

⁴⁴ U.S. Department of the Army. TR 351-10, *Institutional Leader Training and Education*. (Fort Monroe, VA: Training and Doctrine Command. 1997), 2-13; and U.S. Department of the Army. AR 350-1, *Army Training and Education*. (Washington, DC: Department of the Army. 2003), Ch.3.

are often dependent and have low self-direction initially, but must gradually take greater control of their learning in order to develop into truly self-directed learners. The misrepresentation of self-directed learning in the regulations governing OES will appear throughout the programs in the analysis that follows.

OBC and CCC

For the purposes of this analysis, OBC and CCC are combined due to their similarities in program design, instructor certification, and incorporation of Common Core tasks. The basis for this analysis is a thorough review of the curriculum for OBC and CCC in the following branch schools: Armor, Field Artillery, Signal, Transportation, the Combined Logistics CCC, Military Police and Chemical Corps. This review showed clear patterns in the balance between Common Core tasks and branch specific tasks in the areas that this monograph examines. In all seven branch schools reviewed, Common Core tasks provided most tasks or instruction methods pertinent to this study. The only exception to this was in branch specific training that incorporated distance learning media for completion. While the various branch schools are at different stages of implementation of distance learning programs, this chapter will address distance learning in under the principles for analysis.

The analysis begins with the question of whether these programs incorporate critical thinking into the curriculum, the apparent answer is that they do. According to Common Core tasks 155-297-0010: Integrate Historical Awareness and Critical Thinking Skills Derived from Military History Methodologies into the Training and Education of Self and Subordinate Leaders and task 155-397-0010: Integrate Critical Thinking Skills Derived from Military History Methodologies into the Advanced Training and Education of Subordinate Officers, Warrant Officers, and Non-Commissioned Officers, the courses clearly incorporate critical thinking. However, much like the reference to self-learning in the regulations, simply having a task for

critical thinking does not ensure that critical thinking is present. (See Appendices A and B for full task descriptions)

In OBC and CCC this issue leads to the second question: What are assessment tools for learners' performance and expected performance in critical thinking? The performance measures within these tasks show significant gaps between theory and application. As an example, performance measure 5d for task 155-297-0010 is "Applied critical thinking skills to analyzing current missions" and the evaluation technique is "Go/No Go." Performance measure 9d for task 155-397-0010 is "Described how to apply critical thinking skills to analyzing current missions." There are at least two problems with these performance measures alone. The first problem is that the Training Support Package (TSP) for these tasks lacks any description of critical thinking skills.⁴⁵ Evaluators and students must be able to describe and assess the application of critical thinking skills, but there are no skill descriptions for them to use. Certainly, the education field is still in the midst of a debate about the best way to assess critical thinking, but performance measures without some attempt to define these skills are meaningless. Currently none of the OBC or CCC programs reviewed use the eight skills developed by ARI for assessment, although ARI recommended their inclusion in CCC in its August 2003 newsletter.⁴⁶ The second problem with this example is the "Go/No Go" method of evaluation. Critical thinking is a way of thinking and it should not be evaluated in terms of whether it is present or not present. Critical thinking is developmental, occurring in stages depending on a learner's familiarity with the subject and awareness of his own thinking. To evaluate these skills (assuming such skills are identified) in such black and white terms defies the nature of critical thinking. In a review of OBC and CCC curriculum in the seven branch training centers noted earlier, as well as the Common Core

⁴⁵ Army Training Support Center, Common Core web site. "Captains Career Course"; available from <http://www.atsc.army.mil/itsd/comcor/ccc.asp>; Internet accessed on 25 September 2004.

⁴⁶ Riedel, Sharon L. "Critical Thinking Training for Army Schoolhouse and Distance Learning", 14: [paper on-line]; available from <http://www.hqda.army.mil/ari/pdf/august2003.pdf>; Internet accessed on 20 September 2004.

training support packages for critical thinking, all of these courses depend on the task format provided above for critical thinking instruction.⁴⁷ When analyzed from adult learning, these tasks are not consistent with critical thinking theory and application.

Shifting from the issue of critical thinking to self-directed learning, do OBC and CCC specifically focus on opportunities for self-directed learning? None of the programs in OBC and the CCC reviewed for this monograph focus on self-directed learning. While all OBC and CCC programs use the small group instruction technique in accordance with AR 350-1 and TRADOC Regulation 350-10, this does not equate to focusing on self-direction. Additionally, OBC and CCC course designers continue to use life long learning and distance learning synonymously. Fort Knox's University of Mounted Warfare (UMW), a non-accredited system that includes OBC and CCC, is a representative example of how program designers take life long learning and self-development to a new understanding based on distance learning practices.⁴⁸ In the case of UMW, distance learning consists of directed lesson plans with fixed evaluation criteria. Many of these programs are integral parts of CCC and are therefore mandatory for the successful completion of the course. At present, the learner has no input into the subject matter, plan for instruction, or evaluation of learning in these programs. Some of the distance learning programs are available to

⁴⁷ United States Field Artillery School Directorate of Training and Doctrine web site. "Fires XXI"; available from <http://sill-www.army.mil/FDIC/default.htm>; Internet accessed on 12 November 2004; United States Army Armor School web site, "University of Mounted Warfare"; available from <http://147.238.144.82/UMW>; Internet accessed on 12 November 2004; United States Army Signal School web site. "Training Update"; available from <http://www.gordon.army.mil/AC/Wntr02/tngupdt.htm>; Internet accessed on 12 November 2004; United States Army Infantry School. "Battalion Policy Memo #1-22: Infantry Training Strategy. Full Professional Infantry Curriculum for IOBC Lieutenants." [paper on-line]; available from http://www.benning.army.mil/iobc/welcome/policy_ltrs/1-22%20in%20tng%20strategy%20revision.doc; Internet accessed on 12 November 2004; Hedges, Major Blaine and Captain Chuck Gutowski, "Chemical Training. A Change for the Better." [paper on-line]; available from http://www.wood.army.mil/chmdsd/Army_Chemical_Review/pdfs/2004%20Oct/ChmOfficerTraining-04-2.pdf; Internet accessed on 12 November 2004; United States Army Air Defense Artillery School. "Captains Career Course Syllabus." [paper on-line]; available from <https://airdefense.bliss.army.mil/secure/oac/>; Internet accessed on 12 November 2004; United States Army Transportation Corps web site. "Military Education"; available from http://www.eustis.army.mil/ocot/Officer_Proponency/military.htm; Internet accessed on 12 November 2004.

officers who are in operational assignments but wish to enroll in the learning as part of self-development, but again, the subject, instruction plan, and evaluation are fixed. Initiatives under Transformation may be broadening the nature of distance learning programs in the near future, however.

To maximize leaders' experiential learning and to reduce turbulence and expenses, the Army plans to rely increasingly on distance learning. The Army recognizes that its "distance learning courseware must address the diverse needs of adult learners [which] include: a need to know why learning is required, a need to direct their learning, a need to contribute their experiences to the learning situation, a need to apply what they have learned to solve real world problems, and a need to feel competent and experience success throughout the learning program."⁴⁹

Nonetheless, just as it is in the adult education field, Internet-based learning is an important tool in self-directed learning, but does not constitute self-direction in itself.

Analysis of OBC and CCC and the associated Common Core training to this point would indicate that the programs have little or no current capability for fostering self-direction in its students. However, a strength shared by all of these programs answers the fourth question: Does program promote learning networks and learning exchanges? This reference to networks and exchanges is not simply a matter of web-based learning in the example of distance learning. More importantly, the networks discussed by researchers in self-directed learning refer to the continuing exchange of knowledge outside the classroom between learners and practitioners of a particular expertise. Distance learning programs may be a small part of this, but OBC and CCC each offer more powerful networks that allow for a free exchange of ideas between continuing learners. All OBC and CCC programs promote professional learning exchanges through the

⁴⁸ Armor School web site, "University of Mounted Warfare"; available from <http://147.238.144.82/UMW>; Internet accessed on 12 November 2004.

⁴⁹ Kilner, Major Peter, "Transforming Army Learning Through Communities of Practice." [paper on-line]; available from <http://www.leavenworth.army.mil/milrev/English/MayJun02/kilner.htm> : Internet accessed on 25 September 2004.

Internet sites “Platoon Leader” and “Company Command.”⁵⁰ These exchanges offer opportunities for officers to continue learning about their profession from peers and experts and to choose their own subjects and learning outcomes. These exchanges are central to self-directed learning and thus, to life long learning. The importance distinction between these sites and structured distance learning programs is the ability to choose the subject, content, and learning outcomes. Users open up links on the “Platoon Leader” and “Company Command” sites according to their learning needs and they read as much or as little as they need according to their own assessments.

The last and possibly most important question for analysis asks if OBC and CCC provide staff training on self-directed learning and critical thinking and broaden the opportunities for implementation? None of the OBC and CCC programs examined provides staff training for critical thinking or self-directed learning. Instructor certification and training is governed by TRADOC Regulations 350-10 and 350-70 and is further augmented by branch specific requirements.⁵¹ Critical thinking is a Common Core task that appears only in the Common Core portions of all programs reviewed. The only reference to specific instructor training or preparation for critical thinking instruction is the same Training Support Package noted earlier, which lacks any specific reference to teaching or assessing critical thinking skills. None of the programs provided any training on self-directed learning or any terms closely associated with the Army definition of life long learning. This result is not surprising considering that OBC and CCC programs have no provision for self-directed learning in their curriculum. Therefore these programs would logically not include instructor training outside of stated learning objectives.

⁵⁰ Platoon Leader web site. available from <http://platoonleader.army.mil/user.php>: Internet accessed on 13 November 2004; and Company Command web site. available from <http://companycommand.army.mil/>: Internet accessed on 13 November 2004.

⁵¹ U.S. Department of the Army. TR 351-10, *Institutional Leader Training and Education*. (Fort Monroe, VA: Training and Doctrine Command. 1997); and U.S. Department of the Army. TR 350-70, *Systems Approach to Training Management, Processes, and Products*. (Fort Monroe, VA: Training and Doctrine Command. 1999)

ILE and AOWC

Turning to an assessment of ILE and the associated AOWC now, this study will pose the same questions to these programs that were applied to OBC and CCC. The basis for analysis for ILE and AOWC is the academic year 2003-2004 curriculum and associated student texts. Academic year 2003-2004 was the first year of the full implementation of ILE and AOWC as a replacement for CGSOC at Fort Leavenworth and serves as a useful program for assessment in the midst of OES Transformation.

Referring again to the five principles of assessment for adult learning institutions, the first question asks, do ILE and AOWC incorporate critical thinking in their curriculum? Not only do ILE and AOWC incorporate critical thinking in their curriculum, they lead all other programs in OES as the current focus for critical thinking instruction. In the words of Army researchers, critical thinking:

has been integrated into the Command and General Staff College's (CGSC) Intermediate Level Education (ILE) and Advanced Officers' Warfighting Course (AOWC) curriculum. In ILE, the CT model and eight CTS [Critical Thinking Skills] are taught in five core course instruction blocks: Foundations, Leadership, Strategic Studies, Operational Studies and Tactical Studies. They are integrated into 16 course modules and 63 course lesson plans. In AOWC, the model and CTS are taught in 6 blocks of instruction, including Operational War fighting, Division Operations, Brigade Operations, History, Leadership and Digits. It has been integrated into 45 lesson plans.⁵²

Additionally, ILE includes the seven-lesson block "Critical Reasoning and Creative Thinking" within the first two weeks of the course to expose students to critical thinking practices that can be applied throughout the remainder of the course.

Having easily answered the first question, the next question is what assessment tools for learners' performance and expected performance in critical thinking do ILE and AOWC have.

ILE and AOWC instructors use the CGSC Form 1009C to provide assessment on students'

⁵² Riedel, Sharon L. "Critical Thinking Training for Army Schoolhouse and Distance Learning", 14: [paper on-line]; available from <http://www.hqda.army.mil/ari/pdf/august2003.pdf>; Internet accessed on 20 September 2004; and United States Army Command & General Staff College. *C120: Critical Reasoning and Creative Thinking*. Fort Leavenworth, KS: CGSC. 2003.

critical thinking skills. (See Appendix C for a copy of this form) The form is a blend of developmental learning theory from Bloom's Taxonomy of Learning Objectives, an adaptation of the eight critical thinking skills above, and a list of eight intellectual standards.⁵³ The format also includes a quantitative assessment of the activities in instruction and a qualitative assessment of results. Based on current adult learning theories and practices, this assessment form appears to be consistent with desired outcomes of critical thinking. This form of assessment is far more beneficial to the learner than the "Go/No Go" feedback provided in OBC and CCC. Despite the apparent effectiveness of this assessment tool, however, according to a survey of CGSC faculty for academic year 2003-2004, faculty use of this form did not meet the college standard.⁵⁴ Additionally, the survey concluded that "critical reasoning as a discrete skill suffers from inadequate use of the CGSC 1009-series Forms for detailed level feedback towards performance improvement within a learning environment."⁵⁵ Consequently, the apparent usefulness of this assessment from an adult learning perspective was negated by the failure of instructors to use it.

ILE and AOWC have an adequate grasp of critical thinking according to the first two questions. Now the questions turn to the issue of self-directed learning. Does the program specifically focus on opportunities for self-directed learning? In a review of ILE and AOWC curriculum, there is no specific focus on self-directed learning opportunities. The curriculum contains elements that could be contributors to self-directed learning, however. At the beginning of ILE, small group advisors and their students produce an individual development plan (IDP) that will allow students to identify areas for improvement throughout the course. (See Appendix

⁵³ Bloom, Benjamin S. *Taxonomy of Educational Objectives: Book 1 the Cognitive Domain*. (New York: Longman. 1984)

⁵⁴ United States Army Command and General Staff College Development and Assessment, Evaluation Program. "Quantitative Data." [paper on-line], D-71; available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>: Internet accessed on 14 November 2004.

⁵⁵ United States Army Command and General Staff College Development and Assessment, Evaluation Program. "AOWC" [paper on-line], 3; available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>: Internet accessed on 14 November 2004.

D for a copy of SD Form 481, Individual Development Plan)⁵⁶ This plan is similar to the concept of directed self-development training and depends largely on instructor counseling and accountability for successful completion. Survey data collected from the 2003-2004 academic year indicates that the IDP provided meaningful feedback to students during ILE, but not during the subsequent AOWC block.⁵⁷ Furthermore, the survey does not provide any data on how that feedback contributed to achievement of individual learning goals. Further research may reveal the effectiveness of the IDP, however, like self-development training, the IDP is missing the important element for moving the student from instructor dependence to independence and autonomy in learning. Another potential contributor to self-directed learning in ILE and AOWC is the small group instruction design. However, as this study clarified earlier, small group instruction and group participation are not examples of self-directed learning in themselves but are instruction methods that follow strategies for adult learner motivation. The last element that could indicate the presence of self-directed learning in ILE and AOWC is the AOWC elective program. The AAP construct “provides students the opportunity to enhance personal and professional growth while conducting advanced studies related to the core curriculum. The program supports the long-term professional development of the students and does not merely focus on immediate follow-on duty requirements. This broadens student perspectives on military operations and enables the students to pursue many individual and professional needs.”⁵⁸ AOWC students choose from a catalog of subjects and register for electives according to times offered,

⁵⁶United States Army Command and General Staff College. “Change and Leader Education” [briefing on-line]; available from www.dtic.mil/doctrine/education/brf3_armyleadership.ppt; Internet accessed on 14 November 2004.

⁵⁷ United States Army Command and General Staff College Development and Assessment, Evaluation Program. “Quantitative Data.” [paper on-line], D-11; available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>; Internet accessed on 14 November 2004; and United States Army Command and General Staff College Development and Assessment, Evaluation Program. “AOWC.” [paper on-line], 6; available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>; Internet accessed on 14 November 2004.

class size limitations, requirements particular to their career field, or instructor permission. Over one hundred and fifty subjects range from counterinsurgency operations to logistics for executive officers to training on Army Battle Command Systems (ABCS) and generally consist of a twenty-seven hour mix of classroom instruction, group presentations, and individual projects. The AAP subjects all contribute toward the professional development of military officers and provide a variety that offers students several choices. The AAP also offers an independent study elective, but independent only within the parameters of working on one of the web-based learning exchanges such as “Platoon Leader.org” or “S3-XO Net”. Course design, learning objectives, and evaluation criteria for all electives, including the independent study, are determined for the students and published in a Memorandum of Instruction (MOI) catalog before the program begins.⁵⁹ While allowing learners to select subjects from a range of options in the AOWC elective program is consistent with self-directed learning strategies, choosing a subject is only part of the process. For the AAP to be a self-directed learning program, students must also participate with the instructor in the development of learning objectives and the means for assessment. The course must also have a provision for moving the learner from initial dependence on the instructor to a gradual independence in learning. In a twenty-seven hour course, the ability to move learners toward self-direction is questionable, however. Ultimately, while ILE and AOWC certainly have several tools that would be useful in developing self-directed learning strategies, none of them is part of a specific focus or learning objective leading to self-direction.

⁵⁸ United States Army Command and General Staff College Circular 12-1 -- Chapter 7 [booklet on-line]; available from [http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1\(04\)/Cir12-1ch7.asp](http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1(04)/Cir12-1ch7.asp): Internet accessed on 26 October 2004.

⁵⁹United States Army Command and General Staff College Circular 350-5. “Student Handbook for the Command and General Staff Officer Course (AY04-05)” Fort Leavenworth, KS: CGSC. 2004; and United States Army Command and General Staff College. “Elective Course Guide AY 2004-05”: [handbook on-line]; available from <https://cgsc2.leavenworth.army.mil/DCS/registrar/pubs/AAP/index.asp>: Internet accessed on 14 November 2004.

Continuing in the assessment of ILE and AOWC for self-directed learning practices, the fourth question asks, do the program promote learning networks and learning exchanges? Similar to OBC and CCC curriculum, ILE and AOWC promote learning networks through Internet web sites. The two sites that ILE and AOWC include in instruction are the S3-XO net for past, present and future battalion operations officers and executive officers and the Center for Army Lessons Learned site (CALL) for general subjects.⁶⁰ Like their OBC and CCC equivalents, these sites provide opportunities outside the classroom for continuing learners to share knowledge and contribute to self-development training. They also differ from structured distance learning programs because they give learners the ability to choose the subject, content, and their own learning outcomes, which are essential elements of self-directed learning.

Finally, do ILE and AOWC provide staff training on critical thinking and self-directed learning and broaden the opportunities for implementation? The answer to this final question is a blend of positive and negative responses. In the area of critical thinking, CGSC does provide faculty development classes to prepare instructors for critical reasoning instruction and evaluation. Faculty Development includes instruction for all blocks of ILE and AOWC, however, and available survey data provides no specific information about the quality of faculty training in critical thinking. On the other hand, survey data does show that a sixty-five percent of instructors surveyed found that faculty development training did not effectively prepare them to implement lesson plans.⁶¹ Therefore, the answer to the original question is that, yes, ILE and AOWC instructors receive training on critical thinking. However, the quality of this training is suspect based on faculty survey results.

⁶⁰S3-XO Net web site; available from <https://s3-xonet.army.mil/>; Internet accessed on 12 November 2004; and Center for Army Lessons Learned web site; available from <http://call.army.mil/>; Internet accessed on 6 November 2004.

⁶¹United States Army Command and General Staff College Development and Assessment, Evaluation Program. "Quantitative Data." [paper on-line], D-70; available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>; Internet accessed on 14 November 2004.

Other than training on producing an Individual Development Plan, ILE and AOWC faculty members receive no instruction on self-directed learning. Self-directed learning concepts appear randomly in the curriculum in examples such as the IDP and aspects of the elective program, but there is no deliberate learning objective related to producing self-directed learners. Consequently, without a learning objective and associated learning strategies, there would be few reasons to include self-directed learning training in the faculty development program.

Figure 5: Summarized Analysis

Summarized Analysis

According to the analysis above, represented by figure 5, OES has not fully embraced the adult learning practices of critical thinking and self-directed learning. Both sets of programs that

Principles to facilitate CT and Self-direction in institutions	Program	
	OBC/CCC	ILE
Critical thinking in curriculum	Yes	Yes
Assessment tools for critical thinking performance	No	Yes
Specifically focus on opportunities for self-direction	No	No
Promote learning networks and exchanges	Yes	Yes
Staff training on self-directed learning and critical thinking	No	Partial

this study examined have incorporated critical thinking into their curriculum but they are still struggling with the proper staff training and assessment of critical thinking skills. Both sets of programs include elements that could contribute to self-directed learning but they are not part of a deliberate learning strategy to produce self-directed learners. These results reveal not only the state of OES in Transformation according to the Army Chief of Staff's guidance to produce critical thinkers and life long learners. These results expose some underlying assumptions on which OES rests.

In the area of critical thinking, OES has made much progress, largely due to efforts by senior leaders and the Army Research Institute. Over the past several years, ARI and Army

education leaders have begun to incorporate critical thinking instruction into OES curriculum. ILE and AOWC are showing more success than OBC and CCC, possibly due to its earlier implementation, but also because ILE and AOWC use effective assessment tools and faculty development training. Moreover, while ILE and AOWC are showing more success than other programs, this study has identified weaknesses in the consistent use of assessment tools and in effective staff training. As adult education practices indicate, learners need effective feedback and instruction in order to become critical thinkers. Despite these deficiencies, student and faculty surveys indicate that the ILE and AOWC curriculum contributed to increased critical thinking skills and therefore these programs are helping answer the Chief of Staff's call for critically thinker leaders.

OBC and CCC, on the other hand, have done little more than incorporate critical thinking into their curriculum. Presently, they do not provide adequate training for instructors or use effective assessment tools to for critical thinking. ARI has developed eight critical thinking skills that may be used for assessment in OES programs, but none of the OBC or CCC programs reviewed in this study currently use those skills. The "Go/No-Go" evaluation checklist from the Common Core Training Support Package is completely ineffective in providing learners feedback on their critical thinking skills. In an age when junior officers face increasingly complex problems within full spectrum operations, critical thinking abilities are more important than ever before. The present OBC and CCC curriculum does not contribute the Chief of Staff's call for critical thinkers at the lieutenant and captain level.

While critical thinking is showing progress in OES, Army life long learning balances on a pillar of invalid assumption about officers as learners. This pillar, self-development training, has its foundation in the very andragogical assumptions that dominated the adult education field from the 1920's to the 1980's. The assumption that adults are capable of directing their own learning in all subjects and at all times is obsolete, yet it haunts every aspect of self-development and life long learning in OES. In Army regulations governing OES, curriculum descriptions, and self-

development models, the learner is responsible for his own learning outside of formal institutions. Adult learning shows that institutions must foster self-direction in their students so that they may continue to develop and grow outside the classroom, but there is little evidence of this in OES. The system and its leadership continues to promote the assumption that officers will use their own time to achieve organizational learning objectives with the same vigor and self-direction that they might pursue a hobby or personal interest. Cyril Houle and Roger Boshier demonstrate that learners approach learning for a variety of reasons and that affects their motivation to learn. “Career long learners” with goal-orientation will learn what the institution wants them to learn if they are properly rewarded (promotion, pay, etc.) and encouraged. However, they are less likely to pursue professional learning for learning’s sake unless the education system fosters self-direction in formal institutions like OBC, CCC, and ILE. As Stephen Brookfield cautioned in chapter two, self-directed learning is the central component of life long learning. Yet, in the process of evaluating programs in OES according to self-directed practices, this study found that no programs exhibited a specific focus on self-directed learning.

Ultimately, the Chief of Staff’s call for developing life long learners will go unanswered if the pillar of self-development doesn’t bear its share of the load. In an average officer’s twenty-year career, he will spend only three years in formal learning institutions, leaving the remaining seventeen years dependent on the two pillars of operational assignments and self-development training. This study shows that the self-development pillar is not bearing its share for the following reasons: Officers are not inherently self-directed learners. OES programs do little to foster self-directed learning in their curriculum. There is no transition of learning autonomy before graduation. These programs simply release a horde of dependent learners into a system that depends on self-direction for success. Poor counseling by leaders and supervisors leads to the failure to develop and implement a self-development plan. Additionally, placing the preponderance of responsibility for this plan on non-self-directed learners and supervisors who are not educators is a recipe for failure.

OES in Transformation is in the midst of a healthy dialogue with the adult education field. Programs are seeing improvement in critical thinking incorporation, assessment, and application, but more work remains. ARI and other organizations in the Army have already identified several solutions for problems in critical thinking and OES will therefore likely see continued improvement. The Army's commitment to life long learning is a more difficult problem, however. Underlying assumptions that permeate the organization may take more time to change. Solutions for such a problem will require the dedication and energy of the most senior leaders in the Army and those that administer officer education.

CHAPTER FIVE

Conclusions and Recommendations

This monograph assessed current OES programs and initiatives in Transformation using guidelines established by researchers in adult education for the development of critical thinkers and lifelong learners. Focusing on the Officer Basic Course (OBC), the Captains Career Course (CCC), Intermediate Level Education (ILE) and Advanced Operations and Warfighting Course (AOWC), this study examined these programs to determine their compliance with adult learning guidelines. The purpose of this paper was to identify programs in OES that are not meeting the organizational needs for critical thinking officers and life long learners and to make recommendations for improvement. It also highlights areas in OES that require further research.

Army education leaders must implement the ILE and AOWC critical thinking instruction model throughout all programs in OES. While the analysis in the previous chapter shows that critical thinking in OES is gradually becoming a central element in curriculum, some of the problems that this study identified can be solved with relative ease. ARI has already developed eight critical thinking skills that are fully integrated into ILE and AOWC curriculum. Despite some implementation problems in ILE and AOWC, the model is consistent with critical thinking practices from the adult education field. This same model must replace the "Go/No-Go"

Common Core tasks 155-297-0010 and 155-397-0010 in Common Core Training Support Packages. Adding to ARI's recommendation in its August 2003 newsletter, this study recommends that OBC and CCC adopt the same eight critical thinking skills used for assessment in ILE and AOWC.

A second recommendation to improve critical thinking in OES is to build a faculty development training course that is available to instructors throughout OES. As critical thinking becomes progressively more integrated into OES curriculum, all instructors must be capable of recognizing, fostering, and assessing it in their learners. This study identified similar weaknesses in instruction that the 2000 ARI critical thinking workshop identified. According to one participant in the workshop, "none of the relevant skills requires specialized training in formal logic, decision theory, or philosophy. Nevertheless, these are skills that need some explicit attention, and thus it would be best for instructors to receive some specialized training. A useful first step might be the development of a brief, intensified critical thinking course for instructors."⁶² Clearly, OBC and CCC instructors would benefit from this type of training and, more importantly, the students would benefit by gaining skills that are in high demand in the Army today.

While this study largely echoed previous findings regarding critical thinking, the findings in the area of life long learning are the most significant and potentially dramatic. In the course of this study, none of the research reviewed considered the role of self-directed learning in the Army's life long learning strategy. As noted earlier in the monograph, current Army leaders quickly equate life long learning with distance learning despite the broader definition offered by TRADOC. This apparent omission in research is a result of the underlying andragogical

⁶² Cohen, Marvin. "A Three-Part Theory of Critical Thinking: Dialogue, Mental Models, and Reliability," in *Training Critical Thinking Skills for Battle Command. ARI Workshop Proceedings. 5-6 December 2000*, by the Army Research Institute, 81. Alexandria, VA. Army Research Institute for the Behavioral and Social Sciences.

assumption in OES. If officers are inherently self-directed, the only role for OES in producing life long learners is to provide the resources for them to direct their own learning. However, adult learning research demonstrates that adults are not inherently self-directed and resources are only part of self-directed learning.

The first thing that the Army must do to improve life long learning in the Army is to eradicate the andragogical assumption that weakens OES. Army education leaders must recognize that officers are also adult learners and exhibit the same learning characteristics of other adults. While professional military officers may be motivated and “self-starting” leaders in operational assignments, these traits do not automatically transfer to the learning environment. A way to help break this myth is to have ARI approach self-directed learning in the same way that it has approached critical thinking. ARI should focus research on Army officers to examine levels of self-direction in different learning environments and at different points in officers’ careers to determine whether they are implementing self-development plans with or without their supervisors. Research should also examine levels of self-directed learning in professional subjects and in personal interests such as hobbies or non-military activities. Based on existing adult learning research, these studies would undoubtedly conclude that officers are no more inherently self-directed than other adults are and that the andragogical assumptions must finally cease influencing educational practices.

Next, the Army must make the self-development plan a product of institutional learning that carries over to operational assignments. Currently there is no link between institutional learning and self-development training. A way to link these different learning environments is to mandate that OES programs incorporate self-directed learning strategies in their curriculum while concurrently modifying the self-development plan through assessments and counseling. This self-development plan could then be an official document (such as SD Form 481) that the officer hand carries to his next supervisor for inclusion in professional counseling. This form complements counseling that uses the DA Form 67-9-1, Officer Evaluation Report Support Form

and the DA Form 67-9-1A, Junior Officer Development Support Form (JODSF). When an officer returns to institutional learning from an operational assignment he would hand carry this form back to his instructor for continued development. This process should continue throughout all programs in OES. Self-directed learning theory does not differentiate between age or military seniority for levels of self-direction. In fact, according to Brookfield on the subject of graduate students, “most have been away from formal graduate education for some time [and] their ability to translate and transfer their self-directedness from the professional to the academic sphere is difficult to predict.”⁶³ To be truly life long or “career long”, this self-development plan must continue throughout an officer’s career as he goes through different degrees of self-direction.

Finally, the Army must augment research on officer levels of self-direction with research on appropriate self-directed learning strategies for OES programs. While the field of adult education has produced volumes of research and strategies for educational institutions, the military has unique requirements that may call for different strategies. ARI should host a workshop with leading researchers in the field of adult education to help develop these strategies in the same way that it addressed critical thinking. These strategies could then be used to link the three pillars of OES through self-directed learning.

The importance of education during organizational change can not be overstated. The Officer Education System will educate and develop the leaders who will see Transformation into the next generation of the Army. With so much at stake, all leaders in the Army must continue to examine underlying assumptions about traditional ways of thinking and ways of doing business in education. Leaders must be prepared to look at old systems with new perspectives and foster a climate that facilitates growth and positive change. In OES, critical thinking skills are essential to this process and must be properly taught and assessed in formal learning institutions. These skills

⁶³ Brookfield, Stephen. *Self-Directed learning: From Theory to Practice*. (San Francisco: Jossey-Bass. 1985), 46.

can then be taken forward into operational assignments and positions where officers can affect such growth and change. These officers must also be imbued with a thirst for knowledge in their profession that extends beyond the classroom. Only through a commitment to developing life long learners through self-directed learning strategies can such officers thrive throughout their careers. The Army must implement the recommendations above if OES is to reach its full potential in producing life long, critically thinking learners. The success or failure of Transformation rests within the education system and Army leaders must ensure that the system is on solid ground.

Bibliography

- American Heritage Dictionary*. 2nd College Edition. Boston: Houghton Mifflin Company. 1985.
- Army Logistician*. May-June 2003. "Officer Education System to be Revamped."
- Army Research Institute, "Survey Report: Survey on Officer Careers 2000", September 2000. Report No. 2000-11 Washington D.C. in Williams, LTC Marvin. "The Relationship of the Officer Evaluation Report to Captain Attrition". Monograph, United States Army Command and General Staff College, School of Advanced Military Studies, 2001.
- Bloom, Benjamin S. *Taxonomy of Educational Objectives*. Boston: Addison-Wesley Publishing Company. 1984.
- Bloom, Benjamin S. *Taxonomy of Educational Objectives: Book 1 the Cognitive Domain*. New York: Longman. 1984.
- Brockett, Ralph, and Roger Hiemstra. "Bridging the Theory-Practice Gap in Self-Directed Learning." In *Self-Directed Learning: From Theory to Practice*, edited by S. Brookfield. New Directions for Continuing Education No. 25. San Francisco: Jossey-Bass. 1985.
- Brookfield, Stephen. *Developing Critical Thinkers*. San Francisco: Jossey-Bass. 1987.
- Brookfield, Stephen. *Self-Directed learning: From Theory to Practice*. San Francisco: Jossey-Bass. 1985.
- Burlas, Joe. "Initiatives to Improve Education system That Has Served the Army Well": [paper on-line]; available from http://www4.army.mil/ocpa/print.php?story_id_key=5885: Internet accessed on 18 August 2004.
- Center for Army Lessons Learned web site; available from <http://call.army.mil/>: Internet accessed on 6 November 2004.
- Cohen, Marvin. "A Three-Part Theory of Critical Thinking: Dialogue, Mental Models, and Reliability," in *Training Critical Thinking Skills for Battle Command. ARI Workshop Proceedings. 5-6 December 2000*, by the Army Research Institute. Alexandria, VA. Army Research Institute for the Behavioral and Social Sciences.
- Company Command web site. Available from <http://companycommand.army.mil/>: Internet accessed on 13 November 2004.
- Dixon, Kevin, MAJ. "Deciding What Needs to be Done Again: Company Grade Officer Instruction for Army After Next." Monograph, U.S. Army Command and General Staff College, 2000.
- Fastabend, BG David A. and Robert H. Simpson. "'Adapt or Die': The Imperative for a Culture of Innovation in the United States Army": [paper on-line]; available from <http://www.army.mil/thewayahead/acpdownloads/Culture%20of%20Innovation.pdf>: Internet accessed on 6 September, 2004.
- Fraenkel, Jack R. And Norman E. Wallen. *How to Design and Evaluate Research in Education*. 5th ed. New York: McGraw-Hill. 2003.
- Fischer, Susan. "A Framework for Critical Thinking Research and Training," in *Training Critical Thinking Skills for Battle Command. ARI Workshop Proceedings. 5-6 December 2000*, by the Army Research Institute. Alexandria, VA. Army Research Institute for the Behavioral and Social Sciences.

- Gagne, Robert M., and Leslie J. Briggs. *Principles of Instructional Design*. New York: Holt, Rinehart and Winston. 1979.
- Google. available from <http://www.google.com/search?hl=en&ie=ISO-8859-1&q=%22critical+thinking%22>: Internet accessed on 9 November, 2004
- Hedges, Major Blaine and Captain Chuck Gutowski, "Chemical Training. A Change for the Better." [paper on-line]; available from http://www.wood.army.mil/chmdsd/Army_Chemical_Review/pdfs/2004%20Oct/ChmOfficerTraining-04-2.pdf: Internet accessed on 12 November 2004
- Hiemstra, Roger. "Self-Directed Adult Learning: Some Implications for Practice." March 1982. ERIC Document Reproduction Service No. ED 262 259.
- Houle, Cyril.O. *The Inquiring Mind*. Madison: The University of Wisconsin Press. 1961.
- Kilner, Major Peter, "Transforming Army Learning Through Communities of Practice." [paper on-line]; available from <http://www.leavenworth.army.mil/milrev/English/MayJun02/kilner.htm>: Internet accessed on 25 September 2004.
- Kime, Dr. Steve and Dr. Clinton Anderson. "Contributions by the Military to Adult and Continuing Education" [paper on-line]; available from www.fla-acme.org/handbook.htm: Internet accessed on 20 September 2004.
- Knowles, Malcolm.S. *Andragogy in Action: Applying Modern Principles of Adult Learning*. San Francisco, CA: Jossey-Bass. 1984.
- Kolb, David A. *LSI. Learning-Style Inventory*. Boston: McBer & Company. 1981.
- Larsen, Lawrence A. *Initiative- Oriented Training*. Fort Leavenworth, KS: United States Army Command and General Staff College. 1998.
- Lindeman, Eduard and Martha Anderson. *Education Through Experience*. New York, NY: The Workers Education Bureau Press. 1927.
- Madigan James C. *Self-Development and the Art of Battle Command*. Fort Leavenworth, KS: United States Army Command and General Staff College. 1998.
- Merriam, Sharan and Caffarella, Rosemary. *Learning in Adulthood, a Comprehensive Guide*. 2nd ed. San Francisco: Jossey-Bass. 1999.
- Merriam, Sharan and Ralph Brockett. *The Profession and Practice of Adult Education*. San Francisco: Jossey-Bass. 1997.
- Merriam, Sharan. *The New Update on Adult Learning Theory*. San Francisco: Jossey-Bass. 2001.
- Nenninger, Timothy K. *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881-1918*. Westport, CT: Greenwood Press. 1978.
- Platoon Leader web site. Available from <http://platoonleader.army.mil/user.php>: Internet accessed on 13 November 2004.
- Pratt, Daniel. *Five Perspectives on Teaching in Adult and Higher Education*. Malabar, FL: Krieger Publishing Company. 1998.
- Paul, Richard and Linda Elder. *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Upper Saddle River, NJ: Prentice Hall. 2001.

- Riedel, Sharon L. "Critical Thinking Training for Army Schoolhouse and Distance Learning": [paper on-line]; available from <http://www.hqda.army.mil/ari/pdf/august2003.pdf>: Internet accessed on 20 September 2004.
- Riedel, Sharon L. "Training Critical Thinking Skills for Battle Command": [paper on-line]; available from <http://www-ari.army.mil/pdf/rr1777.pdf>: Internet accessed on 20 September 2004.
- Senge, Peter M. *The Fifth Discipline*. New York: Currency Doubleday. 1990.
- Shinseki, Eric K. 1999. Speech before the Association of the United States Army. October 1999.
- S3-XO Net web site; available from <https://s3-xonet.army.mil/>: Internet accessed on 12 November 2004
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. 6th ed. Chicago: University of Chicago Press, 1996.
- United States Army Air Defense Artillery School. "Captains Career Course Syllabus." [paper on-line]; available from <https://airdefense.bliss.army.mil/secure/oac/>: Internet accessed on 12 November 2004
- United States Army Armor School web site, "University of Mounted Warfare"; available from <http://147.238.144.82/UMW>: Internet accessed on 12 November 2004
- United States Army Command and General Staff College web site. *Education and Philosophy*; available from <https://cgsc2.leavenworth.army.mil/education.asp>: Internet accessed 13 February, 2004.
- United States Army Command and General Staff College. "Change and Leader Education" [briefing on-line]; available from www.dtic.mil/doctrine/education/brf3_armyleadership.ppt: Internet accessed on 14 November 2004.
- United States Army Command and General Staff College, Directorate of Academic Operations web site. "Curriculum and Faculty"; available from https://cgsc2.leavenworth.army.mil/dsa/ile/curr_and_fac.asp: Internet accessed on 20 September 2004.
- United States Army Command and General Staff College web site. "Education and Philosophy"; available from <https://cgsc2.leavenworth.army.mil/education.asp>: Internet accessed on 13 February 2004.
- United States Army Command and General Staff College Development and Assessment, Evaluation Program. "Quantitative Data" [paper on-line]; Available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>: Internet accessed on 14 November 2004.
- United States Army Command and General Staff College Development and Assessment, Evaluation Program. "AOWC" [paper on-line]; Available from <https://cgsc2.leavenworth.army.mil/dao/dad/evaluations/index.asp>: Internet accessed on 14 November 2004.
- United States Army Command and General Staff College Circular 12-1 -- Chapter 7 [booklet on-line]; available from [http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1\(04\)/Cir12-1ch7.asp](http://www-cgsc.army.mil/dsa/iosd/program/pubs/Cir12-1(04)/Cir12-1ch7.asp): Internet accessed on 26 October 2004.

- United States Army Command and General Staff College Circular 350-5. "Student Handbook for the Command and General Staff Officer Course (AY04-05)". Fort Leavenworth, KS: CGSC. 2004.
- United States Army Command and General Staff College. "Elective Course Guide AY 2004-05" [handbook on-line]; available from <https://cgsc2.leavenworth.army.mil/DCS/registrar/pubs/AAP/index.asp>; Internet accessed on 14 November 2004.
- United States Army Command & General Staff College. *C120: Critical Reasoning and Creative Thinking*. Fort Leavenworth, KS: CGSC. 2003.
- United States Army Command & General Staff College. *C200: Strategic Studies*. Fort Leavenworth, KS: CGSC. 2003.
- United States Field Artillery School Directorate of Training and Doctrine web site. "Fires XXI" [paper on-line]; available from <http://sill-www.army.mil/FDIC/default.htm>; Internet accessed on 12 November 2004
- United States Army Force Stabilization web site; available from <https://www.stabilization.army.mil/faqs.htm>; Internet accessed 12 November 2004.
- United States Army Infantry School. "Battalion Policy Memo #1-22: Infantry Training Strategy. Full Professional Infantry Curriculum for IOBC Lieutenants." [paper on-line]; available from http://www.benning.army.mil/iobc/welcome/policy_ltrs/1-22%20in%20tng%20strategy%20revision.doc; Internet accessed on 12 November 2004
- United States Army Signal School web site. "Training Update"; available from <http://www.gordon.army.mil/AC/Wntr02/tngupdt.htm>; Internet accessed on 12 November 2004
- United States Army Signal School. "Concept for Leader Development Campaign Plan": [briefing on-line]; available from <http://www.gordon.army.mil/symposium/2002/2002pri/briefings/OCOS/CO%20Workshops/Officer%20PD%20Workshops/02%20OES-Mosley.pdf>; Internet accessed on 12 November 2004.
- United States Army Transportation Corps web site. "Military Education"; available from http://www.eustis.army.mil/ocot/Officer_Proponency/military.htm; Internet accessed on 12 November 2004.
- United States Army, "The Way Ahead: Our Army at War...Relevant and Ready": [paper on-line]; available from <http://www.army.mil/thewayahead/focus.html>; Internet accessed 6 September 2004.
- U.S. Department of the Army. AR 350-1, *Army Training and Education*. Washington, DC: Department of the Army. 2003.
- U.S. Department of the Army. TR 351-10, *Institutional Leader Training and Education*. Fort Monroe, VA: Training and Doctrine Command. 1997.
- U.S. Department of the Army. TR 350-10, *Institutional Leader Training and Education*. Fort Monroe, VA: Training and Doctrine Command. 2002.
- U.S. Department of the Army. TR 350-70, *Systems Approach to Training Management, Processes, and Products*. Fort Monroe, VA: Training and Doctrine Command. 1999.
- U.S. Department of the Army. FM 25-100, *Training the Force*. Washington, DC: Department of the Army. 1988.

- U.S. Department of the Army. FM 3-0, *Operations*. Washington, DC: Department of the Army. 2003.
- United States Army Training and Doctrine Command web site: "Definitions"; available from http://www.tradoc.army.mil/pao/Web_specials/life_long_learning/definitions.htm: Internet accessed on 20 September 2004.
- United States General Accounting Office. "Status of Recommendations on Officers' Professional Military Education." Washington, D.C.: United States General Accounting Office. 1991.
- United States Army Training and Doctrine Command web site: "Leaders Perspective"; available from http://www.tradoc.army.mil/pao/Web_specials/lifelong_learning/leadersperspective.htm: Internet accessed on 20 September 2004.
- Watts, Barry D. *Clausewitzian Friction and Future War*. Washington DC: Institute for National Strategic Studies, National Defense University. 1996.
- Webster's New Collegiate Dictionary*. Springfield, MA: Merriam-Webster. 1986.
- Wilds, E. quoted in William Neugebauer *Army Continuing Education System: Andragogical-Pedagogical Orientations of Education Services Officers, Education Services Specialists and Guidance Counselors*. Ann Arbor: UMI Dissertation Services, 1991.
- Wlodkowski, Raymond. *Enhancing Adult Motivation to Learn*. San Francisco: Jossey-Bass. 1999.

Appendix A: OBC Critical Thinking Task

Integrate Historical Awareness and Critical Thinking Skills Derived from Military History Methodologies into the Training and Education of Self and Subordinate Leaders

155-297-0010

Conditions: Given an assignment to train/educate self and subordinate leaders in a tactical environment and copies of FM 100-5 and FM 100-1.

Standard: Employ military history and battle analysis methodology/concepts as tools for studying military professionalism and for applying critical thinking skills to military problems while pursuing self-study or training subordinate leaders.

Training and Evaluation

Performance Steps:

1. Interpret military history methods and their relationship to military professionalism.
2. Employ military history in studying military problems.
3. Describe to subordinate leaders how to study military history.
4. Interpret battle analysis methodology and concepts.
5. Employ the battle analysis process in studying military problems.
6. Describe to subordinate leaders how to apply the battle analysis process.

Performance Evaluation Guide

Evaluation Preparation: Evaluate the soldier while he/she is conducting a professional development class. The class must use the battle analysis methodology, military history methods, and critical thinking skills to relate military history to military problems.

Brief Soldier: Tell the soldier to relate military history to military problems.

Performance Measures	Results
1. Interpreted military history methods and their relationship to military professionalism. a. Defined military history. b. Identified six of eight kinds of activities covered by military history. c. Identified all four basic types of military history.	GO / NO-GO GO / NO-GO GO / NO-GO
2. Employed military history in studying military problems. a. Described why military professionals study military history. b. Described how to study military history effectively. c. Applied critical thinking skills to analyzing current missions.	GO / NO-GO GO / NO-GO GO / NO-GO
3. Described to subordinate leaders how to study military history. a. Described why military professionals study military history. b. Described how to study military history effectively. c. Described how to apply critical thinking skills to analyzing current missions. d. Evaluated subordinate leaders application of the study of military history.	GO / NO-GO GO / NO-GO GO / NO-GO GO / NO-GO
4. Interpreted battle analysis methodology and concepts. a. Defined battle analysis. b. Demonstrated how to select a subject for battle analysis.	GO / NO-GO GO / NO-GO
5. Employed the battle analysis process in studying military problems. a. Selected an appropriate subject for battle analysis. b. Described the strategic, operational, and tactical settings of the selected subject. c. Drew appropriate lessons learned from the analysis. d. Applied critical thinking skills to analyzing current missions.	GO / NO-GO GO / NO-GO GO / NO-GO GO / NO-GO
6. Described to subordinate leaders how to apply the battle analysis process. a. Selected an appropriate subject for battle analysis. b. Described the strategic, operational, and tactical settings of the selected subject. c. Drew appropriate lessons learned from the analysis. d. Described how to apply critical thinking skills to analyzing current missions. e. Evaluated subordinate leaders application of battle analysis methodology and concepts.	GO / NO-GO GO / NO-GO GO / NO-GO GO / NO-GO GO / NO-GO

Evaluation Guidance: Score the soldier GO if 75 percent or more of the performance measures are passed and NO-GO if less than 75 percent of the measures passed. If the soldier scores NO-GO on a performance measure, show the soldier what was done wrong and how to do it correctly.

Required References:

AR 870-5

TR 350-13

FM 100-5

FM 100-1

This task summary was last updated on May 17, 1999.

Appendix B: CCC Critical Thinking Task

Integrate Critical Thinking Skills Derived from Military History Methodologies into the Advanced Training and Education of Subordinate Officers, Warrant Officers, and Non-Commissioned Officers

155-397-0010

Conditions: Given an assignment to engage in advanced training of subordinate leaders in a tactical environment and copies of FM 100-5 and FM 100-1.

Standards: Employ the evolution of 20th century combined arms warfare, battle analysis methodology/concepts, and the staff ride as tools for studying military professionalism and for applying critical thinking skills to military problems while pursuing the training of subordinate leaders.

Training and Evaluation

Performance Steps:

1. Interpret the evolution of 20th century combined arms warfare and its relationship to military professionalism.
2. Employ the evolution of combined arms warfare in studying the tactical and operational environments.
3. Describe to subordinate leaders how to study the evolution of combined arms warfare.
4. Interpret advanced battle analysis methodology and concepts.
5. Employ the advanced battle analysis process in studying military problems.

6. Describe to subordinate leaders how to apply the advanced battle analysis process.
7. Interpret the staff ride planning methodology.
8. Employ the staff ride planning methodology in studying military problems.
9. Describe to subordinate leaders how to apply the staff ride planning methodology.

Performance Evaluation Guide

Evaluation Preparation: Evaluate the soldier while he/she is conducting a professional development class. The class must use the evolution of 20th century combined arms warfare, advanced battle analysis methodology, staff ride planning methodology, and critical thinking skills to relate military history to military problems.

Performance Measures	Results
1. Interpreted the evolution of 20 th century combined arms warfare and its relationship to military professionalism. a. Defined combined arms warfare. b. Identified all three basic roles of the Army on the battlefield. c. Identified five of seven Army combat functions.	GO / NO GO GO / NO GO GO / NO GO
2. Employed the evolution of combined arms warfare in studying the tactical and operational environments. a. Defined the tactical and operational environments. b. Described why military professionals study combined arms warfare. c. Applied critical thinking skills to analyzing current missions.	GO / NO GO GO / NO GO GO / NO GO
3. Described to subordinate leaders how to study the evolution of combined arms warfare. a. Defined the tactical and operational environments. b. Described why military professionals study combined arms warfare. c. Described how to apply critical thinking skills to analyzing current missions. d. Evaluated subordinate leaders' application of the evolution of 20 th century combined arms warfare.	GO / NO GO GO / NO GO GO / NO GO GO / NO GO
4. Interpreted advanced battle analysis methodology and concepts. a. Defined advanced battle analysis. b. Demonstrated how to select a subject for battle analysis.	GO / NO GO GO / NO GO
5. Employed the advanced battle analysis process in studying military problems. a. Selected an appropriate subject for advanced battle analysis. b. Described the strategic, operational, and tactical settings of the selected subject.	GO / NO GO GO / NO GO

c. Drew appropriate lessons learned from the analysis. d. Applied critical thinking skills to analyzing current missions.	GO / NO GO GO / NO GO
6. Described to subordinate leaders how to apply the advanced battle analysis process. a. Selected an appropriate subject for advanced battle analysis. b. Described the strategic, operational, and tactical settings of the selected subject. c. Drew appropriate lessons learned from the analysis. d. Described how to apply critical thinking skills to analyzing current missions. e. Evaluated subordinate leaders' application of advanced battle analysis methodology and concepts.	GO / NO GO GO / NO GO GO / NO GO GO / NO GO GO / NO GO
7. Interpreted the staff ride planning methodology. a. Defined the staff ride. b. Identified all three phases of the staff ride planning methodology.	GO / NO GO GO / NO GO
8. Employed the staff ride planning methodology in studying military problems. a. Selected a site for staff ride planning. b. Described the preliminary, field, and integration phases. c. Applied critical thinking skills to analyzing current missions.	GO / NO GO GO / NO GO GO / NO GO
9. Described to subordinate leaders how to apply the staff ride planning methodology. a. Selected a site for staff ride planning. b. Described the preliminary, field, and integration phases. c. Described how to apply critical thinking skills to analyzing current missions. d. Evaluated subordinate leaders' application of the staff ride planning methodology.	GO / NO GO GO / NO GO GO / NO GO GO / NO GO

Evaluation Guidance: Score the soldier GO if all performance measures are passed.

Score the soldier NO-GO if any performance measure is failed. If the soldier scores NO-GO, show the soldier what was done wrong and how to do it correctly. Allow the soldier time to retrain and retest.

Required References:

AR 870-5

TR 350-13

FM 100-5

FM 100-1

CMH Pub 70-21

This task summary was last updated on June 15, 1999.

Appendix C: Fires XXI Self-Development Training

INTRODUCTION

PURPOSE

Self-development training is one of the three major components (institutional, unit and self-development) of the emerging Army Training Strategy and is key in growing adaptive soldiers and leaders. It serves to maximize the potential of the individual soldier or leader to serve in progressively more complex assignments and assists in developing flexible leaders who can operate across the entire spectrum of operations. It also allows the soldier to maintain technical skills on his own so that he can go beyond mere task performance in other pillars of training.

DEFINITION

Self-development training and education consists of individual study, research, professional reading, practice and assessment. It is a planned, progressive program to sustain and enhance military competencies. It consists of both directed and self-motivated study and includes both civilian and military education.

BACKGROUND

Self-development has always been part of Army training but has usually been very informal and not an integral part. The Army plan is to require 40 hours of self-development training annually. The primary reason is because the body of professional knowledge is increasing at such a rapid pace that learning must be a continuous part of a soldier's career. Additionally, a wide range of information age technologies now enables self-development, allowing it to become an accepted and rewarded component of professional growth.

GOALS

The Army – and thus the Field Artillery – has three goals concerning self-development training and education:

Inculcate a culture of continuous learning throughout the Army.

Establish self-development as a central component of Army training.

Leverage distance-learning (DL) technologies for worldwide learning.

COMPONENTS OF SELF-DEVELOPMENT TRAINING

DIRECTED SELF-DEVELOPMENT

This component is required, not optional. It consists of training directed by the institution and unit leadership and focuses on requirements for the individual soldier or leader to maintain and enhance skills, prepare for the next assignment, prepare for subsequent promotions and prepare for school attendance.

The responsibility for completing self-development training obviously rests with the individual soldier, however the unit and the institution play important roles. The unit personnel must establish the directed program and objectives, track the soldier's progress and assess the training. The institution must provide the training products and define prerequisite training for resident courses. Unit directed training will normally be refresher/recertification training or job specific training. Additional unit and institutional responsibilities are covered later in this chapter.

Some of the examples of directed self-development training are:

Prerequisite training prior to resident training. This will usually be via DL media.

Assignment related training to qualify a soldier for a new duty.

College/vocational courses related to a specific duty. An example would be technical writing for a newly assigned operations NCO.

Web-based sustainment training. An example of this is DL modules for a recently reclassified soldier.

Additional Skill Identifier (ASI)/functional courses.

SELF-MOTIVATED DEVELOPMENT

This component of self-development is designed for soldiers to voluntarily take those actions that will improve their performance, prepare them for future assignments, or gain new capabilities.

Soldiers must be encouraged to pursue skills and knowledge beneficial to their career development. The unit and institution have similar responsibilities – the unit chain of command must assist soldiers in developing their programs and must support and mentor them as they proceed. The institution must provide the training materials in media accessible to the soldier.

Typical self-motivated programs are:

Basic Skills Education Program (BSEP). Improves reading, mathematics and communication skills.

College/vocational courses. Leads to degrees, certificates and licenses.

Professional reading. The Chief of Staff of the Army's professional reading list is at Appendix D.

Army Correspondence Course Program (ACCP). Provides a variety of MOS specific courses. See Chapter 3.

RESPONSIBILITIES

The soldier bears the responsibility for completing self-development training, however the institution and the unit must take the actions that will enable him/her to be successful.

INSTITUTION

USAFAS must ensure that the training products are available worldwide to support self-development training. There are currently numerous products available and they are outlined later in this chapter. USAFAS has initiated a program that will ultimately develop multi-media training

products for every task and every skill level. Additionally, USAFAS will define the prerequisite training for resident courses.

UNIT

As always, the commander is the key to self-development. The commander must direct and supervise the self-development of assigned soldiers and leaders much as he directs and supervises unit individual and collective training.

The first line leader is also key to this program. He must develop the unit-specific directed self-development objectives, track and assess the soldier's progress in both institution and unit directed training, and provide the mentoring required.

SOURCES OF SELF-DEVELOPMENT TRAINING

ARMY EDUCATION CENTERS/LEARNING CENTERS

Army Education Centers and Learning Centers offer a wide variety of training and education support products. All offer college and vocational courses, BSEP courses and access to a wide range of other instruction. Additionally, they serve as digital training facilities for Army Computer Based Training (CBT).

COLLEGES AND UNIVERSITIES

REIMER DIGITAL LIBRARY (RDL)

As mentioned previously, the General Dennis J. Reimer Training and Doctrine Digital Library is an electronic library that serves as a repository for approved Army training and doctrine materials. It serves as a user-friendly interface to these materials on the World Wide Web (WWW). It provides access to ACCP products, Soldier Training Publications, Special Texts, and Training Circulars. The library can be entered at <http://155.217.58.58/atdls.htm>.

FORT SILL HOMEPAGE

The Field Artillery specific ACCP courses are available through the Training Command link on the Fort Sill Homepage (<http://sill-www.army.mil>). Additionally, USAFAS has developed MOS-specific courses and modules that are available by CD-ROM. In the future USAFAS will develop multi-media training products for all FA MOS and all skill levels.

CHIEF OF STAFF OF THE ARMY'S PROFESSIONAL READING LIST

Historically, one of the distinguishing characteristics of outstanding soldiers is a broad-based knowledge acquired through a challenging personal professional development program largely based on reading. Institutional and unit training cannot cover every aspect of a soldier's intellectual development. The Chief of Staff of the Army's Professional reading list is intended to provide material for an individual professional development program. The list of books is in Appendix D and is divided into sub lists appropriate for varying levels of experience and responsibilities. Commanders are encouraged to incorporate these books into professional development programs.

SUMMARY

Self-development education/training is a key component of the Army's future training strategy. Capitalizing on using information age technologies to produce and deliver much of the training, institutions develop, units monitor and mentor, and soldiers are responsible for completing the assigned program. Its design is to prepare soldiers and leaders with knowledge and skills necessary to succeed both personally and professionally in today's and tomorrow's Army.

Appendix D: SD Form 481: Individual Development Plan

<p>OFFICE OF THE SECRETARY OF DEFENSE ORGANIZATION OF THE JOINT CHIEFS OF STAFF</p> <p>INDIVIDUAL DEVELOPMENT PLAN Of</p> <p>THE INDIVIDUAL DEVELOPMENT PLAN (IDP) is drafted by the employee and supervisor to address training needs and career plans. It should be generated in conjunction with the performance management review, and may be revised at any time. Requests for Government sponsored training should be in accordance with this plan. All GM 13-15, supergrades and equivalents, SES Candidates and members of the Senior Executive Service must provide a copy of the IDP to the Employee Career Development and Training Division, Directorate for Personnel and Security, WHS (room 3B347).</p>	
<p><u>AUTHORITY:</u> Public Law 85-507, July 7, 1958, The Government Employees' Training Act.</p> <p><u>PRINCIPAL PURPOSES:</u> To increase efficiency and economy in the Government by providing for training programs for civilian officers and employees of the Government with respect to the performance of official duties.</p>	<p><u>ROUTINE USES:</u> Records will be processed and maintained by the employee's supervisor and the servicing personnel office of the agency. Information will be made available to the appropriate review authorities. The SSN will be used to accurately identify the employee.</p> <p><u>DISCLOSURE:</u> Disclosure of this information is voluntary. However, failure to provide the requested information may adversely affect the processing of training actions.</p>

SD Form 481, MAY 86

Privacy Act Statement

Previous editions are obsolete.

Page 1 of Pages

Reset

OFFICE OF THE SECRETARY OF DEFENSE ORGANIZATION OF THE JOINT CHIEFS OF STAFF INDIVIDUAL DEVELOPMENT PLAN				DATE PREPARED	
PART A - EMPLOYEE PERSONAL DATA					
1. NAME <i>(Last, First, Middle Initial)</i>		2. ORGANIZATION MAILING ADDRESS <i>(Branch - Division/Office/Agency, Street, City, State, ZIP Code)</i>		3. POSITION TYPE <i>(X one only)</i>	
4. POSITION TITLE		5. OFFICE TELEPHONE NO.		a. NON-SUPERVISORY	
6. SOCIAL SECURITY NO.		7. YEARS OF CONTINUOUS CIVILIAN SERVICE		b. SUPERVISORY	
		8. DATE OF BIRTH		9. SERIES AND GRADE	
PART B - CAREER GOALS					
1. SHORT RANGE CAREER GOALS. <i>(State career goals for the next one to two years. Specify position titles and grade (if appropriate) or subject area.)</i>					
2. LONG RANGE CAREER GOALS. <i>(State career goals for the next three to five years. Specify position titles and grade (if appropriate) or subject area.)</i>					
PART C - DEVELOPMENTAL OBJECTIVES AND PLANNED DEVELOPMENTAL ACTIVITIES TO MEET OBJECTIVES					
To construct meaningful DEVELOPMENTAL OBJECTIVES consider the work assignments and projects the employee has undertaken and will be expected to undertake. What does previous performance indicate? What are the skills, knowledge and abilities the employee needs to acquire? What does the employee need to learn to keep abreast of changes in the career field and in the organization? What skills, knowledge and abilities will enhance the individual's abilities to deal with these changes? From the answers to these questions			develop action statements that delineate in specific terms the areas of competence the employee needs to acquire. (i.e., to develop a working knowledge of DoD EEO objectives so that the employee can uphold these objectives when filling the three vacancies in his/her division.) Once specific objectives are stated different DEVELOPMENTAL ACTIVITIES may be considered to achieve these objectives. For further information consult "A Manager's Guide to Individual Development Plans," Administrative Instruction 40 or the Employee Career Development and Training Division.		
NOTE TO SES MEMBERS - All Developmental Objectives for SES personnel and candidates will be stated in terms of the standard SES competencies:					
I. Integration of Internal and External Program - Policy Issues. II. Organizational Representation and Liaison III. Direction and Guidance of Programs, Projects, or Policy Development			IV. Acquisition and Administration of Financial and Material Resources V. Utilization of Human Resources VI. Review of Implementation and Results		

Reset

NAME <small>(Last, First, Middle Initial)</small>		DATE PREPARED
PART D - SIGNIFICANT PRIOR TRAINING AND DEVELOPMENT RELATED TO THE DEVELOPMENTAL OBJECTIVES <small>(Include government sponsored and self development assignment programs, activities or academic programs. If additional space is needed, attach additional page.)</small>		
1. NAME OF COURSE	2. NAME OF TRAINING CENTER	3. DATE OF COMPLETION
4. IF NO CAREER DEVELOPMENT IS DESIRED OR NEEDED AT THIS TIME, PLEASE STATE SPECIFIC REASONS WHY. <small>(Space may also be used for comments on how the individual Development Plan is to be implemented. For example, if a specific progression of developmental activities is critical it should be stated.)</small>		
PART E - CONCURRENCE AND APPROVAL		
CONCURRENCE		APPROVAL - SES ONLY
1. EMPLOYEE	The Employee Career Development and Training Division will review SES IDP's and obtain the following signature.	
a. SIGNATURE		
b. DATE SIGNED		
2. SUPERVISOR		
a. TYPED OR PRINTED NAME <small>(Last, First, Middle Initial)</small>		
b. POSITION TITLE	c. TELEPHONE NUMBER	3. CHAIRPERSON, EXECUTIVE RESOURCES BOARD
d. SIGNATURE	e. DATE SIGNED	a. SIGNATURE
		b. DATE SIGNED

Reset

